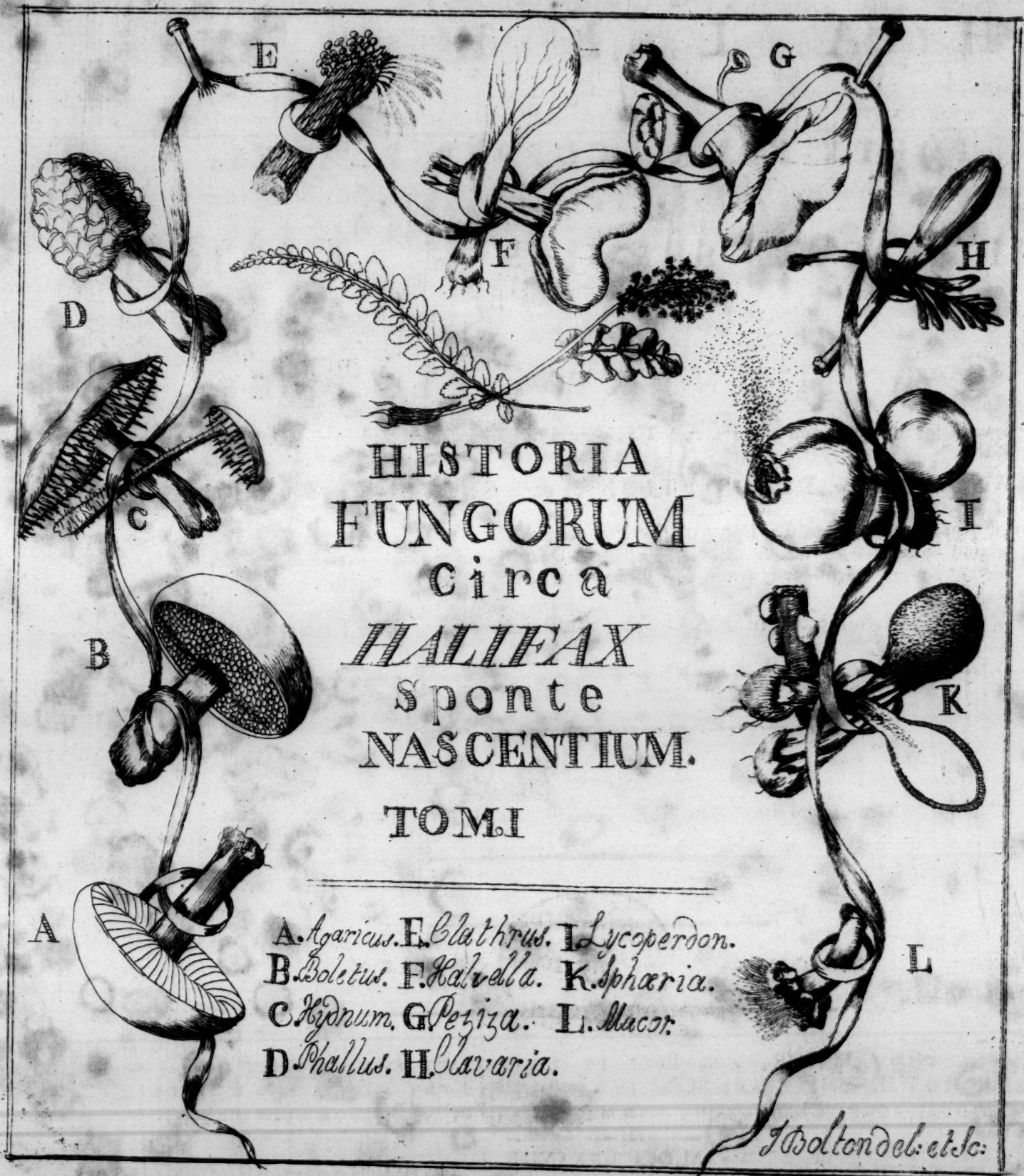




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A N
H I S T O R Y
O F
F U N G U S S E S,

G R O W I N G A B O U T
H A L I F A X.

W I T H
FORTY-FOUR COPPER-PLATES;
ON WHICH ARE ENGRAVED
FIFTY-ONE SPECIES of AGARICS:

Wherein their Varieties, and various Appearances in the different Stages of Growth, are faithfully exhibited
in more than

T W O H U N D R E D F I G U R E S,

Copied with great Care from the PLANTS, when newly gathered and in a State of Perfection.

With a particular DESCRIPTION of each SPECIES, in all its Stages,

From the first Appearance to the utter Decay of the Plant; with the Time when they were gathered; the Soil
and Situation in which they grew; their Duration; and the particular Places
mentioned, where all the New or Rare Species were found.

The Whole being a plain Recital of F A C T S, the Result of more than Twenty Years Observation.

I N T H R E E V O L U M E S.

By J A M E S B O L T O N, K

Member of the Nat. Hist. Society, at EDINBURGH.

V O L. I.

N A T U R A S E M P E R E A D E M.

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M,DCCCLXXXVIII.

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My Lord,

Not to enter into a Detail of the many excellent Qualities wherewith your Lordship's Name stands distinguished, I have an assured Right to address you, as a Generous Promoter of a Science the most rational and most pleasing, as well as the most essential to the Life of Man, I mean that of Botany.

But as no Science can be perfectly and thoroughly understood, till a Knowledge of its constituent Objects be attained, ---Therefore every proper Attempt to discriminate and ascertain its Species, must be useful, in a greater or lesser Degree, in Proportion to its Success.

English BOTANY has received many and great Improvements in the last and present Ages, and yet the most
b 2 extensive

D E D I C A T I O N.

extensive as well as the most entertaining Branch thereof, the CRYPTOGAMIA CLASS, has been too superficially regarded. That our Knowledge of the *Fungi*, the last Order of this Class, is very deficient, will evidently appear from this, that a greater Number of its Species have been actually gathered, in a Compass of Ground not exceeding eight or ten Miles round *Halifax*, than have yet been ascertained in our best and most correct Catalogues of the British Plants. The above Species are the Subject of the present Work; but as Original Drawings from Nature, of the whole Number, are now in your Lordship's Possession, it is not necessary to recapitulate them here.

I am happy, my Lord, to embrace this Opportunity of acknowledging, that it is to your LORDSHIP's Generous Encouragement, together with that of your late Noble Relative, the GOOD DUCHESS DOWAGER of PORTLAND, that the Work in a great Measure owes its Existence, and of professing that

I am,

With the highest Regard,

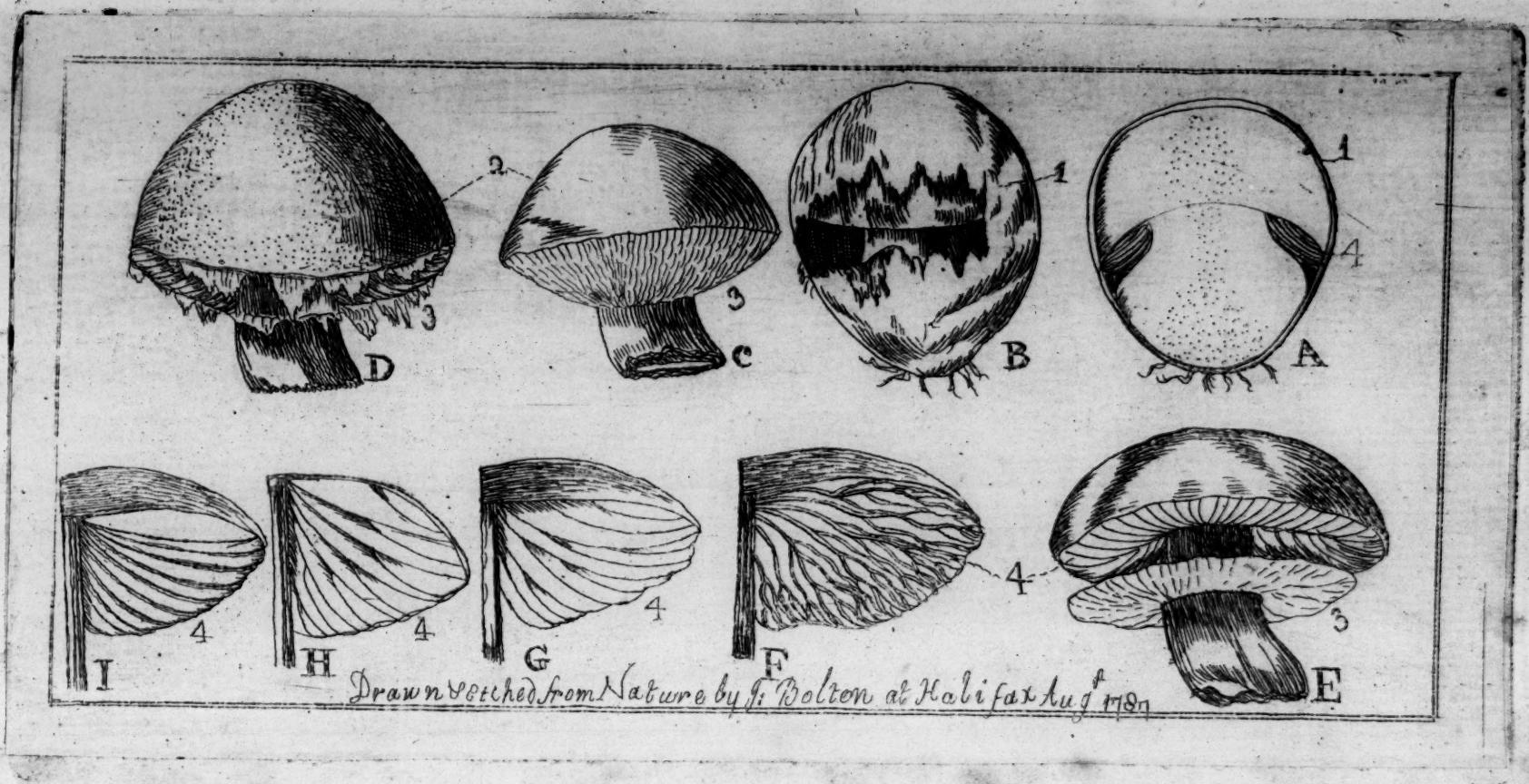
My Lord,

Your Lordship's,

Most obedient and most humble Servant,

HALIFAX,
January 1, 1788.

JAMES BOLTON.



INTRODUCTION.

AS this work may possibly fall into the hands of some who are not Botanists, and yet may have a natural desire to inform themselves of so much of the Theory, as may enable them, by the Practice, to divert the melancholy of an amusive walk, or to pass agreeably, a few hours of rural retirement; whose line of conversation, or whose situation in the country, may not afford them an opportunity of receiving such instructions as may tend to improve, or even awaken, a talent given them by Nature, for an amusement so rational, so pleasing, so conducive to the health of the body, and the recreation of the mind: To these it will not be unacceptable, to be so far informed of the Generic Characters of the Plants here treated of, as may enable them, at sight of a specimen, to determine, at once, to what Genus or Family it belongs.

The

The Figures which are on the engraved title, placed in the book by way of Frontispiece, though they are simple and mean, yet they are Natural, and so far represent the distinguishing Characteristics of the Genera, as may, with the assistance of a short explanation, render them plain to a moderate capacity.

An Explanation of the Frontispiece.

Fig. A. Genus 1. Agaricus (Mushroom).

A Fungus, having a pileus or hat, growing horizontally, and having gills on the under-side. There are two divisions of this Genus, first, having the hat supported on a pillar or stem; second, an hat without a pillar (*parasitic*), adhering by one of its sides to other plants. The little figure at A. represents the *Agaricus integer*.

Fig. B. Genus 2. Boletus (Touchwood).

A Fungus, growing horizontally, having pores or holes on the under-side. There are two divisions of this Genus, first, those without a stem (*parasitic*) adhering laterally to other plants; second, having an upright central stem or pillar. The figure at B. represents the *Boletus luteus*.

Fig. C. Genus 3. Hydnum.

A Fungus, having an horizontal Pileus, with awl-shaped soft prickles growing underneath, the pileus supported on a pillar. The figures at C. represent the *Hydnum repandum*, and *Hydnum auriscalpum*.

Fig. D. Genus 4. Phallus (Morell)

A Fungus, consisting of an hat and a pillar, hat oval, smooth on the inside, honeycombed or eared on the outside. D. represents the *Phallus esculentus*, or common esculent Morell.

Fig.

Fig. E. Genus 5. *Clathrus*.

A Fungus, roundish or oblong, hollow within, netted, latticed or windowed, the latticing connected on every side, often resting on a smooth receptacle, which is supported on a stem or pillar. The figures at E. represent the *Clathrus nudus*, and *Clathrus fulvus*.

Fig. F. Genus 6. *Halvella*.

A Fungus, with a pileus or hat, smooth on both sides. There are two divisions of this Genus, first, with the hat supported on a stem or pillar; second, the hat sessile or without a pillar. The figures at F. represent the *Halvella mitra*, and the *Halvella inflata*; a curious new species, five inches high.

Fig. G. Genus 7. *Peziza*.

A Fungus, bell-shaped, cup-shaped, or fennel-shaped, generally smooth, and of equal substance throughout. The figures at G. represent the *Peziza lentifera*, and an elegant new British species, the *Peziza undulata*.

Fig. H. Genus 8. *Clavaria*.

A Fungus, growing perpendicularly, simple or branched, smooth, and of one uniform surface. The figures at H. represent the *Clavaria muscoides*, and *Ophioglossoides*.

Fig. I. Genus 9. *Lycoperdon* (*Puff-ball*).

A Fungus, roundish, consisting of a bark or rind, which breaks generally in the summit, and discharges an impalpable dust or *farina*, in form of smoke. There are three divisions of this Genus, first, those that are destitute of root, and subterraneous; second, with a root and parasitic; third, with a root, and growing on the ground. The figure at I. represents the *Lycoperdon bovista*.

Fig.

Fig. K. Genus 10. Sphæria.

A Fungus, having numerous spherical or oblong vesicles, regularly arranged under some part of its surface; which vesicles discharge a dust or powder. There are two divisions of this Genus, first, agaric-like, growing on the ground, of a soft filamentous substance, having a proper root, volva, stem, and pileus; second, parasitic, sessile, or supported on a pillar, and are generally of an hard, horny, or woody substance throughout. The little figures at K. represent the *Sphæria tuberculosa*, and the *Sphæria agariciformis*, a new species, four or five inches high, with a bulbous volvated root, a stem, and a pileus. This is a very curious plant, and a true non-descript, as will be seen in its proper place.

Fig. L. Genus 11. Mucor (Mould or Mouldiness).

A Fungus, consisting of a roundish vesicle, supported on a filament, and containing numerous seeds, affixed to an hair-like receptacle. The figure at L. represents the *Mucor mucedo*, as it grew on the stalk of a pear, which had a small part of the fruit adhering to it, in a putrid state.

These few characters being established in the memory, it will be easy, on sight of a specimen, to determine, properly and certainly, to which of the above families it belongs. But the first Genus—the Agarics—being very numerous, and a perplexing similarity obtaining between some of the species, it therefore becomes necessary to examine with care, the form, texture, number, and situation of the parts of the plant under review, before we can discover a certain discriminative, specific mark, peculiar to that species, and not to be found in any other;—and till such a mark be discovered, we cannot truly say, that the species is properly defined or ascertained. I would not here be understood to mean, that we are to discover a part in every species, which is not to be found in some other, this in a simple sense is impossible; but the distinguishing mark is to be discovered

covered by examining all the parts in a combined or complicated scene. And when a plant is discovered, concerning which we are doubtful whether it is a species of itself, or only a variety of species already known, we ought carefully to collate it with the original, from which we suppose it may possibly be derived; and if we find it to agree in the number, figure, and situation of its parts, and that the matter of which it is composed, agree in substance or texture, we may reasonably suppose, that the doubtful plant is a variety and not a species, though it may be much different, in respect to time, soil, magnitude, colour, &c.

On the contrary, though two plants may agree in colour, time, soil, situation, size, smell, taste, &c. yet if they disagree in any one essential mark, we are nevertheless certain of their specific distinction. For instance, suppose the *Agaricus fimitarius* has an upright white stem, growing from a bulbous root, which is destitute of volva; so has the *Agaricus annulatus*. Suppose it further, to have a large white pileus, brown at the apex, and covered here and there with soft brown scales; suppose it to have a white curtain, and gills of a pale flesh colour, while young, and changing their colour afterwards; the *Agaricus annulatus* exhibits all the above characters, as evidently as the other. Thus far, therefore, no certain specific mark is discoverable; but on examining them a little further we find, that the gills of the *fimitarius* are arranged in one series only, being all of equal length, and extended from the rim of the pileus to the top of the stem; but in the *annulatus* they are arranged in several series, unequal in length, which is a certain mark of distinction in the two species. This one diagnostic being found, we then support it by aids, drawn from habit, figure, soil, size, duration, smell, taste, colour, and dissolution; all which being properly attended to, will, with the assistance of application to the study, and actual observation made upon the plants in the different stages of growth, render the knowledge of their specific distinctions, both easy and certain.

To explain a little further what I mean, by aids to support the specific mark, in the above instance, The pileus in the *Agaricus fimitarius*, is of

b

an

an oval figure while young, conical when full grown, and in decay lacerates and dissolves; that of the *annulatus*, globular while young, when full grown bell-shaped, and withers in decay. The gills in the *fimitarius* turn from a red to a black colour, and melt into a black inky fluid; those of the *annulatus* change to a pale brown, and wither. In the *fimitarius*, the curtain vanishes as soon as it has performed its office; in the *annulatus*, it abides after its separation from the pileus, and remains upon the stem to the last.

As a previous knowledge of the parts of an Agaric, will be necessary to the making the above observations, it may not be judged improper to give a short and plain explanation of them referring to the figures in the plate, at the head of this introduction.

Explanation of the Plate.

FIG. A.

Represents a young plant of the *Agaricus muscarius*, cloven downright, to shew the situation of the root, stem, and pileus, while the plant is yet surrounded by the volva; the curtain is removed to shew the situation of the gills. *Fig. 1*, the volva. *Fig. 4*, the gills.

FIG. B.

The same plant, represented as a little advanced in growth, to shew the manner in which the volva, *fig. 1*, is torn by the increase of the pileus and stem.

FIG. C.

Shews the curtain, *fig. 3*, extended from the stem to the rim of the pileus, unbroken, and performing its office. *Fig. 2*. the pileus or hat.

FIG.

FIG. D.

Shews the curtain lacerated, or torn in fragments, part remaining upon the stem, and part on the rim or margin of the pileus:—examples of which we have in the *Agaricus pompatus**, *villosus*, *castaneus*, &c.

FIG. E.

Represents the curtain separating from the pileus all round its margin, without being torn, as in the *Agaricus muscarius*†, *verrucosus*, &c.

FIG. F.

Shews the gills, *fig. 4*, branched, or divided and subdivided; the shorter being united at their base into the longer: as in the *Agaricus chanterellus*, *infundibuliformis*§, &c.

FIG. G.

Shews the gills arranged in three series, of unequal length; the first series extended from the top of the stem to the rim of the pileus; the second series extended but two thirds of the way, and the third series extends but one third of the way from the rim towards the centre: and this arrangement of the gills is the most common. It is however subject to irregularity; the same series sometimes varying in length, in respect to one another; sometimes the alternate order of their disposition is not regular; and the second and third series are sometimes deficient in their number.

FIG. H.

Shews the gills arranged in two series, as in the *Agaricus muscarius*†, and *Agaricus politus*;—but of this arrangement, we have but few examples in the English Agarics.

b 2

FIG.

* Tab. 5, 42, 10.—† Tab. 27.—§ Tab. 34.—‡ Tab. 27, 30.

FIG. I.

Shews the gills arranged in one series only, being all extended from the top of the stem to the rim of the pileus; as in the *Agaricus integer**, *luridus*, *fimitarius*, &c.

The gills furnish us with many other aids, which must necessarily be attended to, in order to the investigation of species. In some they are narrow^a and arched, so as to render the lower surface of the Agaric, as it were excavated or hollow; in others they are straight, making the lower surface nearly plain^b or flat; in others again they are broad and deep, so as to render it prominent or bellied^c. In some they are thin, numerous^d, and very closely arranged; in others they are gross and remote^e. In some the first series adheres by a broad base to the top of the stem^f, and grow narrower towards the extremity; in others they are broad, and lopped off at the base, either adhering to the stem by a small claw^g, or not all adhering thereto. In some they are broadest in the middle, growing narrower^h to each extremity; in others they are narrow and pointed at the base, and grow broader and broader to the extremity, where they are lopped off obtuselyⁱ.—The above circumstances regarding the gills being constant, ought by no means to be disregarded in the description of the species.

Much confusion has long prevailed in this genus of plants, chiefly owing to the brief, or obscure description which have been given of them; for their parts are so few, that every one of them ought to be regarded with the greatest care, with all that is singular, and peculiar to its circumstances.

In describing an Agaric, every part of the plant should be examined, in respect to the following particulars.

The

* Tab. 1, 25, 44.—^a Tab. 3, 31, 40.—^b Tab. 6, 36.—^c Tab. 23, 27, 38.—^d Tab. 25, 44.—^e Tab. 28, 43.—^f Tab. 3, 42.—^g Tab. 6.—^h Tab. 7, 28, 33.—ⁱ Tab. 38.

The Root, whether tapering, bulbous, compressed, or of what other figure; note the colour and consistence of the fibres, and to what they adhere; whether the root produces one single stem, or more than one; and if more how many: say in what situation it grows, and at what season. Note, whether it be furnished with a volva, and if there is a volva, say of what size, figure, texture, colour and duration; if it perishes and disappears before the other parts, say how, and at what age of the plant:—under this head, note also, the duration of the plant, whether it springs up and perishes in the space of a few hours, in one or two days, or whether it abides for weeks.

Of the Stem say, whether upright or leaning; if leaning, whether in a regular curve, or crooked in various directions; whether hard and firm on being pressed between the fingers; or freely yielding to a gentle pressure; whether solid, and of the same substance throughout, or *fistular*, hollow within; whether easily dividing in filaments, or of a brittle spongy substance, not divisible in filaments; say, how thick, how tall, of what colour both within and without.

If there be a Curtain, say, at what age of the plant it breaks, and how, of what colour and consistence it is, and whether it entirely vanishes, or leaves any vestiges.

Of the Gills, as before mentioned, say, if they are in one, two, or three series; whether broad or narrow, many or few; whether fine or coarse; whether adhering to the stem by a narrow claw, by a broad base, or not touching to the stem. Say of what colour from first to last. Note, whether they yield a milky fluid, on being wounded or broken; and if such a fluid, say of what colour, taste, and smell.

Of the Pileus, note, what figure it assumes, from first to last; what its diameter in a state of perfection, or at full growth; whether waved, undulated, or crumpled round the margin, or regular and even; whether
the

the surface be smooth and plain, or rugged with scales, or other inequalities; if rugged, say, whether the matter is of the same substance with, and growing from the pileus, or is of a different substance, adhering to the pileus by means of a glutin, or otherwise; and note the colour of these inequalities.—If the surface is smooth, note how it feels to the touch; whether clammy or dry; whether like cloth, silk, velvet, leather, vellum, or what else; note, whether it consists of much flesh or not, and of what substance and colour within; whether soft and fibrous, or hard and brittle; whether dissolving or withering in decay; and note, what mutations of colour take place on its surface, from the first appearance above ground to the utter decay of the plant.

The plants which now compose the Order *Fungi*, were formerly supposed to be of equivocal generation, the sport of Nature, the effect of Putrefaction, or the brood of Chance; but that they owe their original to the seeds of a parent plant, is now well known, having been proved by MICHELII, in a work entitled *Nova Plantarum Genera*, published at Florence, in 1729, in folio, with many excellent figures; by DILLENII, in his *Catalogus Plantarum circa Giffensis*, published at Frankfort, in 1719; by GLEDITSCH, in his *Methodus Fungorum*, published at Berlin, in 1753; by BATTARA, in his *Fungorum agri ariminensis Historia*, printed in 4to, at Rimini, in 1755; but above all by the ingenious HEDWIG, who in a work entitled, *Historia Generationes et Frustrationes Plantarum Cryptogamicarum*, printed in 4to. at Petropoli, in 1784, has by means of the Microscope proved beyond dispute the existence of stamin and stile, or of male and female organs in these; as perfect as regular, and effective in the production of proper seeds, as in any other vegetable, where they are more obvious to our sight; his observations are illustrated by figures, accurately engraved and coloured, from his own drawings. See his work, plate 34, 35, 36, 37, and from figure 195 to 214.

Some observations may be made in regard to constancy of place, in the plants of this order. The *Agaricus integer*, *villosus*, *purpureus*, &c. the *Boletus luteus*, and *bovinus*; the *Clathrus nudus*, and *denudatus*, I have constantly observed

observed to make their appearance at their respective seasons, in one and the same place;—on the contrary, the *Agaricus elephanticus* grew abundantly in the *Shroggs*, and several other woods about *Halifax*, in October, 1786; this present year, 1787, I have not found more than one or two plants of it.

In the year 1785, the *Peziza cornucopoides* came up abundantly in one place, in the last-named wood, but has not since grown there.

In September, 1777, the *Halvella mitra*, grew plentifully in several woods, in hedges, under trees, and even in pastures and meadows, in this neighbourhood; and since then, in the space of ten years, though my researches have been regularly kept up, I have not met with more than three or four specimens of that rare plant.

These observations bring to my mind others of a like nature, which I have formerly made on the fugacity of some insects, viz. the *Painted Lady Butterfly*, (*Papilio Cardui*, of LINNÆUS) was so plentiful about *Halifax*, in 1780, that scarce a field was without them; in fields where flowering plants grew, particularly the *Scabiosa succisa*, and *Trifolium pratense*, it was easy, with a common bag net, to catch ten or fifteen specimens in the space of an hour or two; but since that time, or for ten years before, that insect has been very rarely, or not at all seen in this part of *Yorkshire*. The like remarks hold good, in a lesser degree, in respect to the *Papilio atalanta*, *Phalæna meticulosa*, &c. and to some Birds, viz. the *Lanius collurio*, *Loxia recurvirostra*, *Turdus turquatus*, &c.

Some species of *Fungi* are perennial and abiding, as the *Sphæria tuberosa*; others, though they die and fall away annually, have an abiding or perennial root, as the *Sphæria hypoxylon*.

The *Phallus impudicus*, a rare plant here, I have observed to grow three successive years, in the same hand's breadth of ground, though I took up the

the plant, with its radical cord, both the first and second year. Its time is in October.

(To be continued in the second Volume)

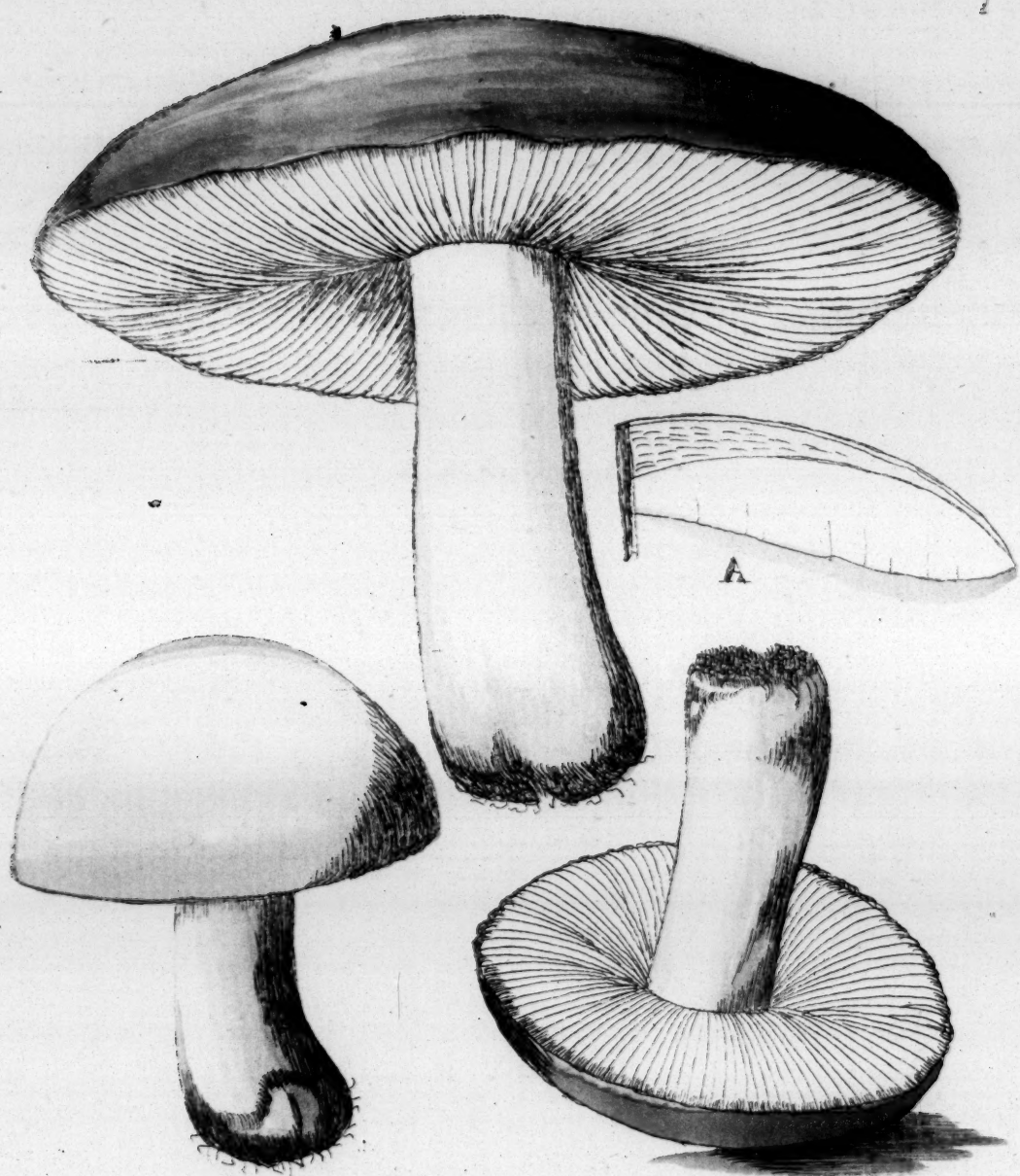
The second Volume will contain the remainder of the *Agarics*, with the three succeeding Genera, the *Boletus*, *Hydnum*, and *Phallus*.

The third will contain the other seven, viz. the *Clathrus*, *Halvella*, *Peziza*, *Clavaria*, *Lycoperdon*, *Sphaeria*, and *Mucor*; many of which being small objects, will be engraved several on a plate,

To many of the plants, here figured and described, I have not been able to apply the Synonyma of Authors, because I had not an opportunity of perusing their works; therefore, any communications from Botanists, which may assist me in applying those Synonyma, particularly those of SCHOEFFER, (whose valuable work I never saw) will be thankfully acknowledged.

* * * The Reader is desired to observe, that the Description and the Drawing were not always taken from the same specimen—the perishable nature of the plant often not admitting it; and where the figure does not exactly coincide with the description, in regard to the precise hue of colour,—so much variation prevailed between the individual which was described, and the individual which was painted.





A N

HISTORY OF AGARICS,

GROWING about HALIFAX.

AGARICUS *stipitatus*, lamellis omnibus æqualibus, Sp: Pl: 1640.
Agaricus stipitatus, pileo convexiusculo viscido purpureo,
lamellis omnibus æqualibus albis. Hud: Angl: 610: 4. Bat-
tar, fung, tab. 15, fig. E.

I.
integer.

EQUAL GILL'D AGARIC.

T A B. I.

THE root is a little swollen and irregular, terminating the stem obtusely; it is firm and feels solid, is of a brittle substance, emits a few proper fibres, and sustains one plant only.

The stem round, upright, solid, of a spongy brittle substance, the thickness of one's thumb, and two or three inches high. The colour is a perfect white, both within and without; there is no curtain.

The gills in one series, regularly extended from the head of the stem to the rim of the pileus; sometimes, however, there are a few intermediate ones extending but half way. They are constantly of a pure white colour, while young of a tender substance, and greedily devoured by the snails.

The pileus smooth, while young of a globular figure, and covered with a glutin*. When in perfection horizontal, smooth, plain, sometimes white, often strongly tinged, especially towards the rim, with a fine crimson, a carnation, or a purple colour, which in decay changes to a dirty blue or green; diameter from two to four inches, abounds with flesh of a spongy brittle substance, and white colour; at last dissolves in a brown turgid jelly.

Grows in all the woods about *Halifax*, in plenty, from August to November.

B

* A gummy or glutinous fluid, which is found, like a varnish, on the surface of many Agarics.

2 AN HISTORY OF AGARICS,

II. AGARICUS *stipitatus pileo convexo fusco, lamellis trifidis*
lotus. latissimis carneo pallidis.

BROAD AGARIC.

T A B. II.

THE root is a little swelled, or approaching to a bulbous figure; it is hard and firm if pressed between the fingers, of a white colour within, and of a dry brittle substance; covered on the outside with innumerable dawy fibres, by means whereof it brings up a covering of the mould, amongst which it grows, when it is gathered. It produces one plant only, and has no volva.

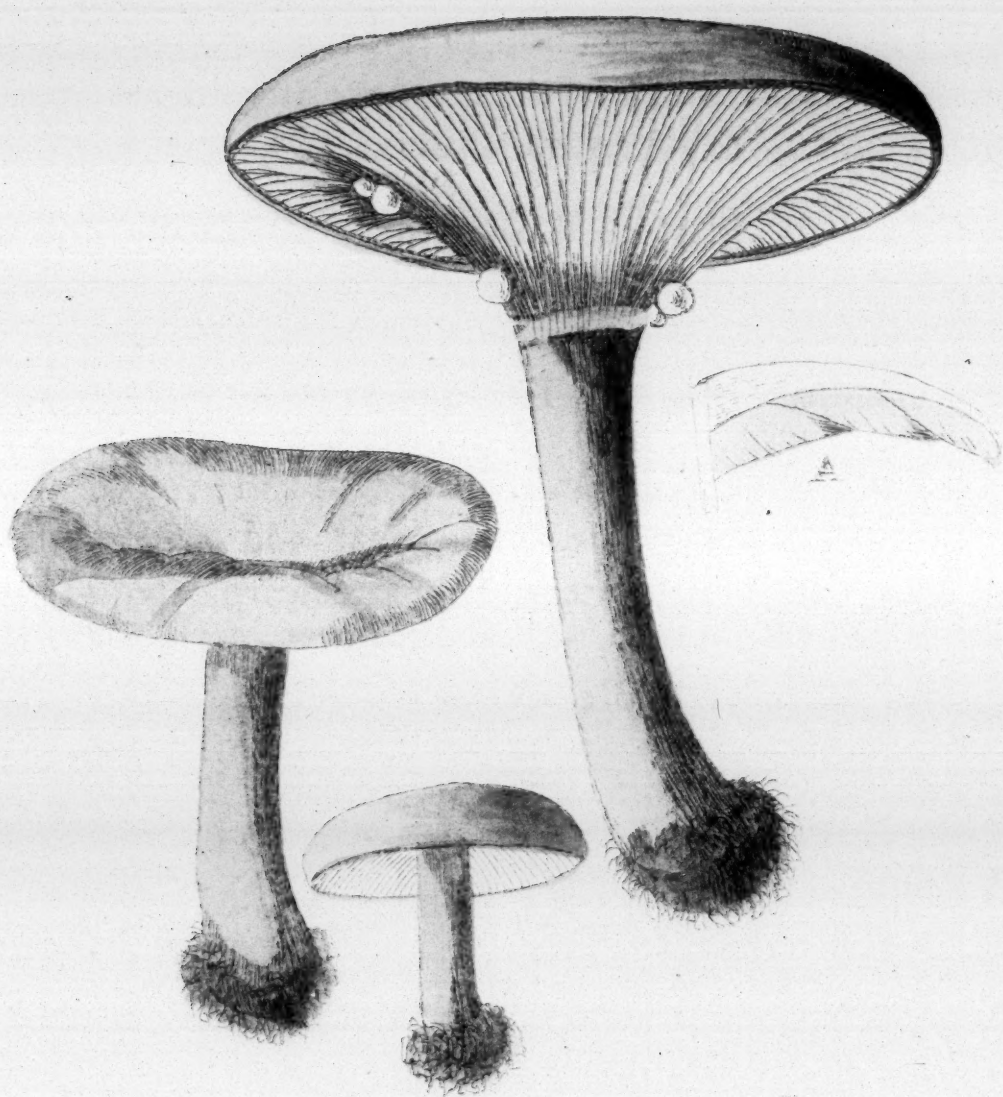
The stem round, upright, firm, solid, and is easily divisible in fine, shining, silky filaments, is about the size of one's middle finger, and four inches high. The colour, a dusky white on the outside, and of a silver white within; it has no curtain.

The gills in three series, broad, deep, and large, *as expressed at A*; they are numerous, thin, and pliable: they are white, and faintly tinged with a kind of dusky flesh colour.

The pileus from four to seven inches diameter, of a smooth dry substance, feels like fine woollen cloth, and is of a kind of brownish mouse-colour. The substance of the flesh brittle and spongy, and of a fair white.——This plant differs from the *A. integer*, in that the gills are in three series, from the *A. muscarius*, and *A. annulatus*, in having neither volva or curtain.

Grows under old wood piles, and amongst rotten saw dust, in September and October.





GROWING ABOUT HALIFAX.

3

AGARICUS *stipitatus*, pileo carneo lactescente, lamellis rufis, III.
stipite longo corneo, Sp: Pl: 1641. Hudson Angl: 614. *lactifluus*.
 Flo: Scot: 1012. Schæf: Fung: tab: 73. Bulliard, Pl:
 282.

MILKY AGARIC.

T A B. III.

THE root is swelled, hard, round, of a brown colour, and emits brownish short fibres from its sides; it produces one plant only, and is not surrounded by a volva.

The stem is round, hard, and firm, generally leaning, or curved; it is the thickness of one's little finger, and three inches high; the substance is white within, and the colour on the outside a pale reddish brown.—There is no curtain.

The gills in three series, narrow, arched, and adhering to the stem by a narrow claw; they are numerous, and of a brittle substance. While young they are white, afterwards changing to a pale brownish buff colour; when wounded or broken a white milky fluid, of a mild taste, issues out in round drops.

The pileus at first convex, afterwards becomes horizontal, and at last funnel shaped; but in all its stages, from first to last, the margin is deflected. The surface is dry, smooth, and feels like cloth; of a dark cinnamon brown colour, and from two to four inches diameter. The substance of the flesh dry and brittle.

Grows in woods about *Halifax* abundantly, from August to November.

IV. AGARICUS *stipitatus*, pileo hemisphærico purpureo livido,
denticulatus. lamellis margine dentatus, stipite fistuloso.

TOOTHED GILL'D AGARIC.

T A B. IV.

THE root is hard and oblique, of a brown colour, and covered with dawy fibres; it is not surrounded by a volva.

The stem is the thickness of a goose-quill, hollow, the substance thin, pliable, and tough, easily splitting in thin silky filaments; the colour a very pale brownish hue, height two or three inches; it has no curtain.

The gills in three series, deep, and adhering to the stem by their base; they are remote, thin, pellucid, of a pale, livid, watery, purple colour, and are remarkable in being dented along the edges with visible rust coloured dents, *as is expressed at A*. These dents, according to the ingenious HEDWIG, are the male parts of fructification. See his *Theoria Cryptogamicarum*, P. 162. tab. 34, fig. 196, 197.

The pileus hemispherical, two inches diameter, a little deflected, and striated at the rim; of a dull livid purple, almost destitute of flesh, and of a watery substance; it dissolves in decay.

Grows in woods near *Halifax*, but not plentifully. The specimen here described, grew in *Stump-Wood*, in *Northowram*, September 10, 1787.

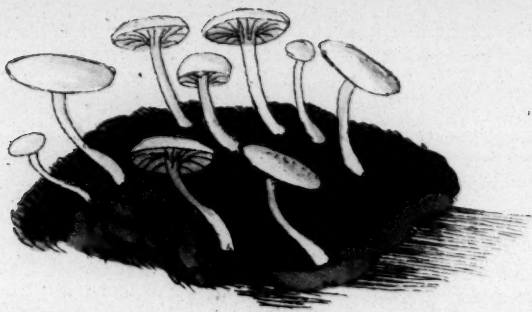
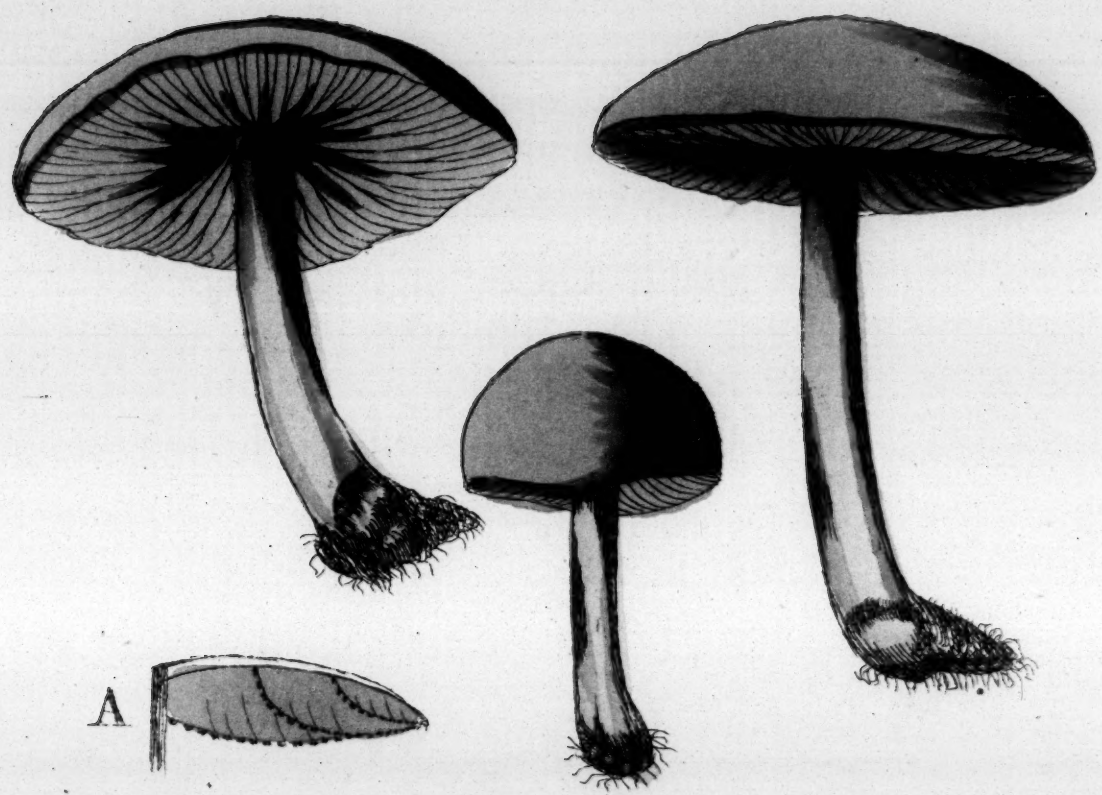
V. AGARICUS *stipitatus*, pileo plano, lamellis besidus stipite,
eburneus. lamellæ et pileo albo.

IVORY AGARIC.

T A B. IV. FIG. II.

THE whole plant is of a pure white colour, pellucid, and seems as if made of ivory.

Grows in meadows, amongst the grass, in September. The Specimen here figured, I gathered amongst the grass under the elm trees near *Stannary-Lane*, September, 1787.





AGARICUS *stipitatus*, pileo rotundo coccineo, lamellis olivaceis
stipite inaequale.

VI.
pomposus.

POMPOUS AGARIC.

T A B. V.

THE root consists of an hard and pointed termination of the stem, covered with dawy fibres, of a white grey colour; it has no volva.

The stem is three or four inches high, largest above, tapering towards the root, often bent irregularly, of a pale yellow above, brown near the root, and easily divides in yellow filky filaments.

The curtain a pale yellow colour, breaks like a fine and delicate spider's web, or the finest filky dawn. It quite vanishes before the decay of the plant.

The gills in three series, narrow, thin, numerous, and delicate; while young of a pale yellow, afterwards changing to a greenish olive colour. They adhere to the stem by a narrow claw.

The pileus two or three inches diameter, deflected round the margin, where it is of a yellow colour, gradually changing to a fine orange, as it approaches towards the centre, which is of a deep orange or scarlet colour. The flesh thick, brittle, and of a pale yellow.

Grows in woods about *Halifax*, frequent in September and October.

VII. AGARICUS *stipitatus, pileo repando semiplucido, lamellis trifidis repandus. carneo pallidis, stipite fistuloso albo.*

SPREADING AGARIC.

T A B. VI.

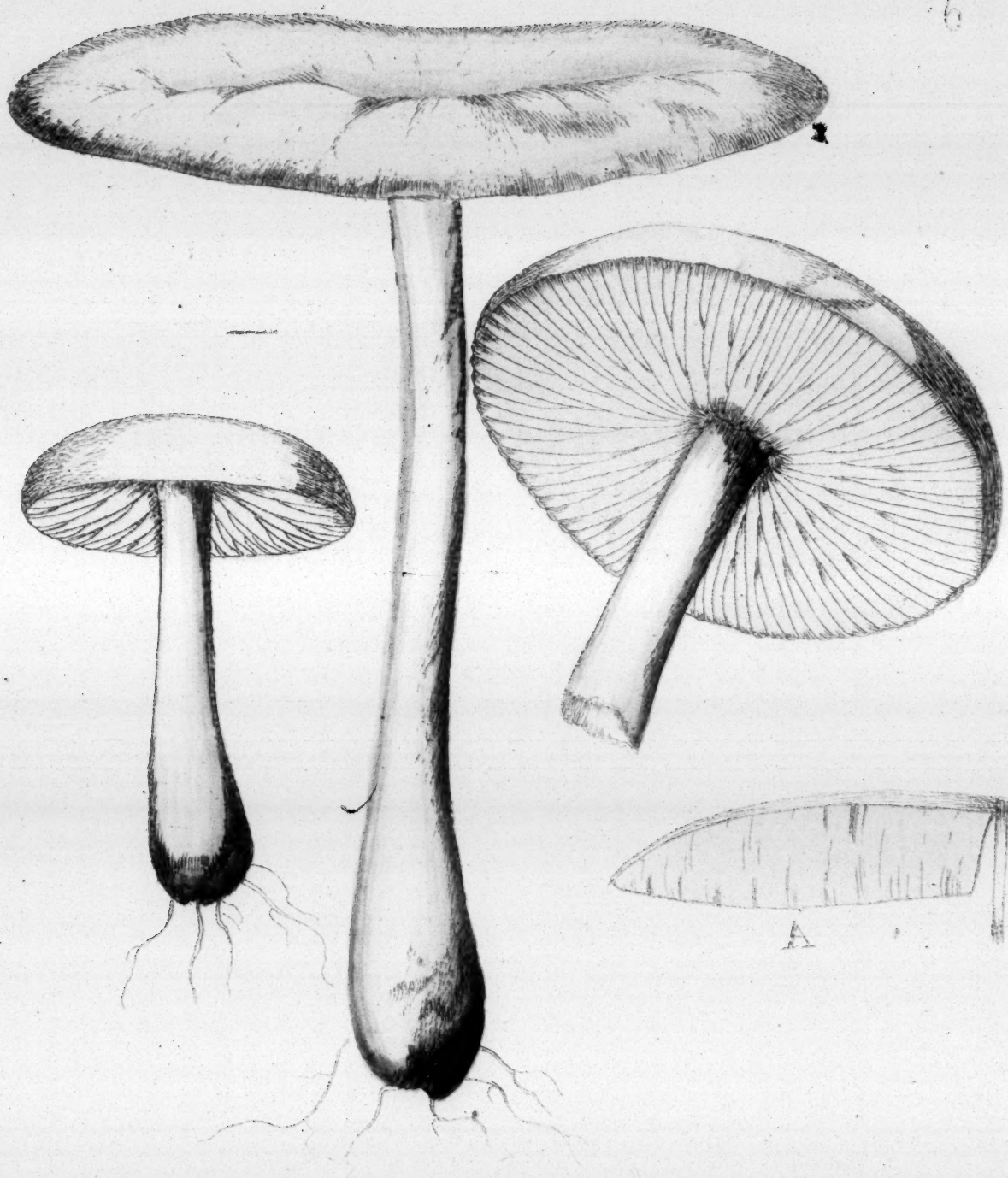
THE root tapers to a point, from which it sends out a few hard crooked fibres, an inch or two in length; it has no volva.

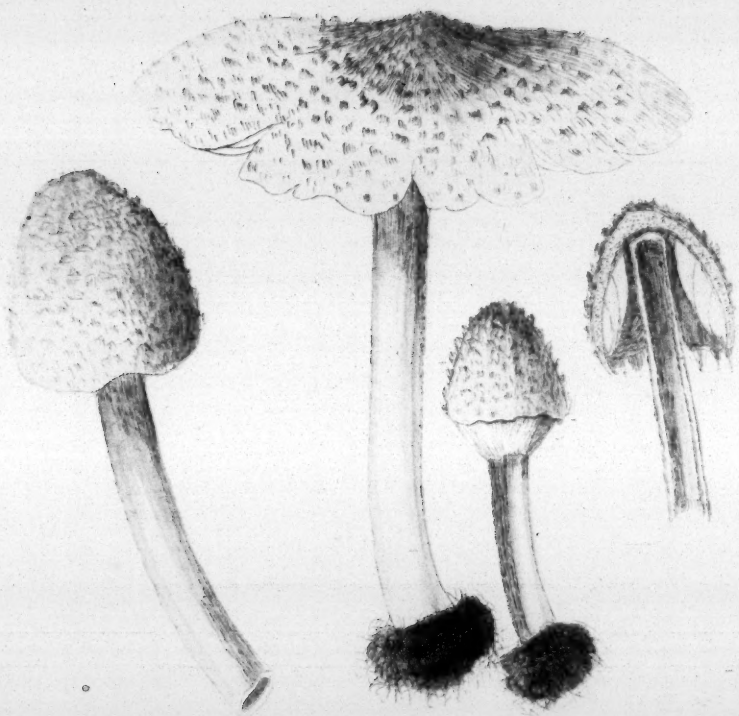
The stem white, shining, with a silky gloss, largest near the bottom, gradually tapering upwards, sometimes a little twisted, and of an irregular surface. It is five inches high, fistular, and easily splits in small white shining filaments; there is no curtain.

The gills are in three series, deep and very remote, terminating in a broad base, but not adhering to the stem. See figure A. They are of a tender soft pliable substance, and tinged with a faint dusky flesh colour.

The pileus convex at first, when in perfection horizontal, spreading out at the rim; four or five inches diameter; of a dead white colour, a tender watery substance, and destitute of flesh.

Grows in the shady parts of woods in the neighbourhood of *Halifax*, in August and September.





✓ *AGARICUS stipitatus, pileo lacerato plumoso, lamellis trifidis
stipite fistuloso.*

VIII.
crisatus.

CRESTED AGARIC.

T A B. VII.

THE root is round, hard, and brown; surrounded with soft
dawny brown fibres, entangled amongst a grey mouldy
matter: it has no volva.

The stem is round, hollow, and smooth; two inches high;
the thickness of a duck's quill; of a pale brownish colour,
easily dividing into silky filaments.

The curtain white, tender, breaks and vanishes while the
plant is young.

The gills in three series, white, of a tender substance,
broadest towards the base, but not adhering to the stem.

The pileus at first conical, afterwards becomes horizontal,
and lacerated round the rim; two inches in diameter, and of a
soft silky substance: the ground colour a pale milky white.—
It is thickly covered with little tufts, of a brown red colour,
which are not the fragments of a volva, but grow from the
substance of the pileus.

It grows in gardens, but not common. This specimen
grew in the garden of J. Cook, Esq; of *Warley*, Septem-
ber 15, 1787.

8 AN HISTORY OF AGARICS,

IX. AGARICUS *stipitatus, pileo lobato, lamellis trifidis decurrentibus, stipite tortuoso.*
cornucopioides.

CORNUCOPIA AGARIC.

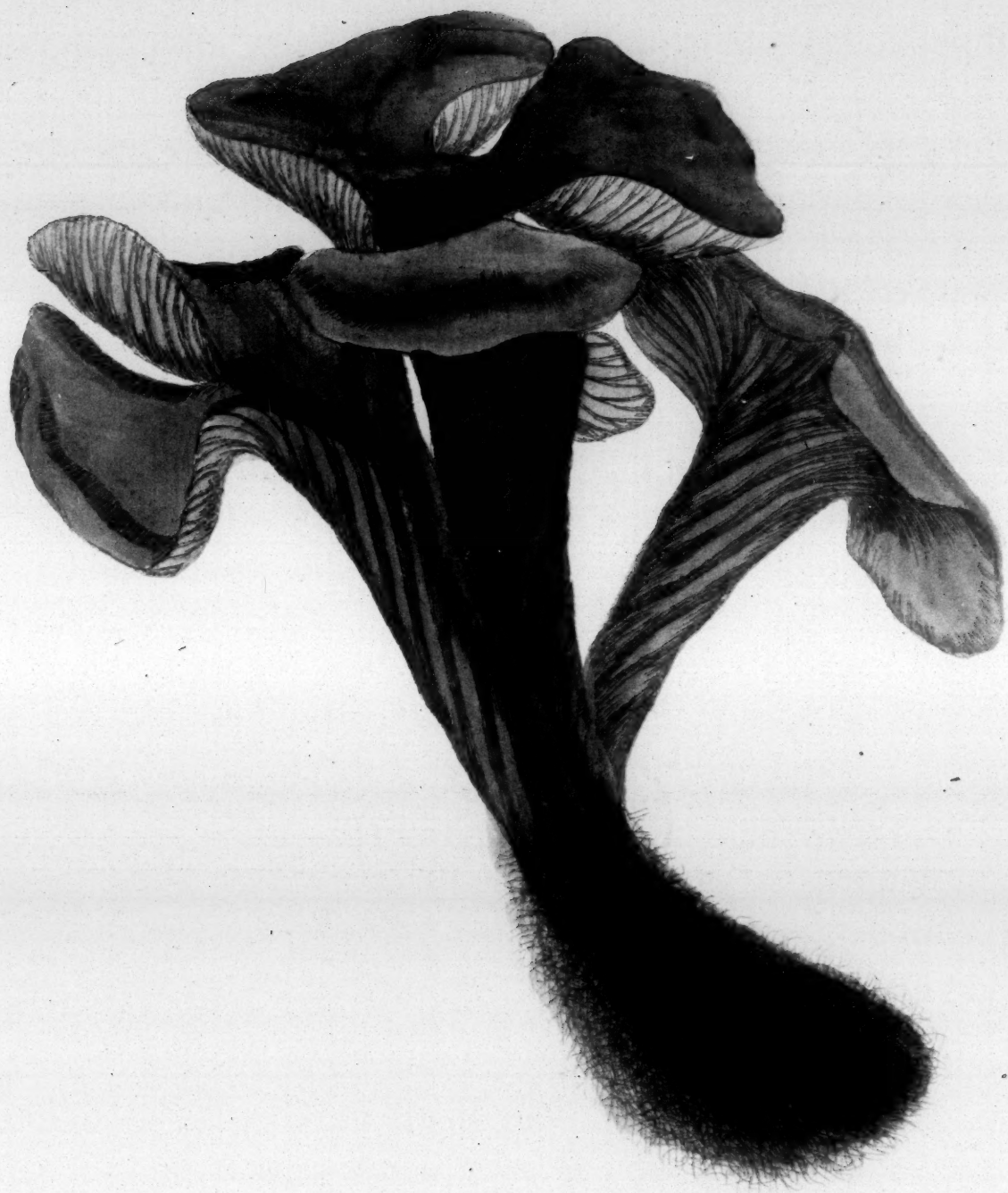
T A B. VIII.

THE root is tough, irregular, much twisted, and surrounded with numerous woolly fibres, of a red brown colour; an inch or two from the bottom divides in several flat twisted furrowed stems, of a black brown colour, and a tough elastic leathery substance; upwards they enlarge, and become more visibly twisted, are strongly corded or nerved, which cords or nerves are a continuation of the decurrency of the gills. These stems grow four or five in number, from the same root, are four or five inches high, and of a dead brown colour.

The gills are in three or four series, they are remote, narrow, tough, and of a dead buff brown; they are remarkably decurrent, their bases running down the stem, even to the root.

The pileus three inches diameter, lobed in a singular and not inelegant manner. The lobes are four or five in number, waved and curled on the edges, thin, or almost destitute of flesh, of a tough elastic substance, and a dusky cinnamon colour.

Grows in shady woods about *Halifax*, but not plentifully. The plant here figured, I gathered in a little wood, near the farm called *Brakenbed*, in *Ovenden*, September 3, 1787.





AGARICUS *stipitatus*, pileo testaceo, succo lutescente, Sp: Pl: X.
1641. Hud: Ang: 613. Battar, fung, tab. 16, fig. H. deliciosus.

ORANGE AGARIC.

T A B. IX.

THE root is an obtuse termination of the stem; it is hard, and emits numerous dawning brown fibres; gathering a portion of mould with it, when taken up: there is no visible volva.

The stem is hard, crooked, and brittle; the thickness of a swan's quill, and two inches high; the substance brittle, white within, and not divisible in fibres; when old becomes fistular. There is no curtain.

The gills thin, narrow, arranged in three series; the second and third series irregular in length; they are of a brittle substance, and a pale buff colour; when broken a milky fluid issues out in drops, of a yellow colour, and of a soft herby taste in general; but in some a little acrid, especially while young.

The pileus a little waved round the rim, and while young deflected; then becomes horizontal, and at last umbelicated in the centre; but the margin does not rise, so as to give it a funnel shape. The colour of both pileus and stem is a fine full bright orange. In decay it turns brown and dissolves.

Grows in *Ramsden*, and many other woods about *Halifax*, in October.

It differs from the *A. lactifluus*, in being of a scarlet or orange colour, in bleeding a yellow milk, in being a smaller plant, and in that it never becomes funnel shaped.

XI. AGARICUS *stipitatus, pileo subconico castaneo, lamellis trifidis,*
castaneus. stipite albo fistuloso, cortina alba.

CHESTNUT AGARIC.

T A B. X.

THE root is a small, irregular, roundish bulb, of a firm substance, emitting a few hard brown fibres; it is not surrounded by a volva, and produces one plant only.

The stem is cylindrical, white, and the thickness of a goose-quill; it is fistular, with a small perforation; the substance firm, elastic, and easily divides in fine silky fibres. Its height is about three inches.

The curtain is thin and delicate, breaks from the centre, hangs for a little while to the rim of the pileus, and then vanishes, leaving no annulus on the stem; it is white.

The pileus at first conical, with an obtuse point, afterwards becomes hemispherical, and at last nearly flat. The surface is smooth, and of a bright beautiful chestnut brown.

The gills are in three series; the third series very short, and while the plant is young imperceptible; they are of a very pale buff colour, and of a thin and delicate texture.

This is a rare species; I have only seen it in two or three places, particularly in a little wood called *Bracken-Bed-Wood*, in *Ovenden*, where I gathered the specimen here figured and described, in October, 1786.





GROWING ABOUT HALIFAX. II

AGARICUS *stipitatus*, pileo hemisphærico membranecio albido, XII.
lamellis trifidis remotis pallidis, stipite albido fistuloso. membranaceus.

MEMBRANEOUS AGARIC.

T A B. XI.

THE root consists of numerous dawny fibres connected to a soft spongy termination of the stem below; there is no volva.

The stem white, fistular, and of a thin substance, easily dividing in fine filaments; It is about the thickness of a swan's quill, and two or three inches high: there is no curtain.

The gills white, thin, deep, and remote, soft, flexible, and very delicate; afterwards acquire a faint reddish brown tinge, and turns quite black in decay.

The pileus hemispherical, white, consisting of a thin transparent membrane, sometimes a little waved round the margin, and constantly more or less deflected.

Grows in the shady parts of woods, on the decaying roots of fallen oak trees, about *Halifax*, in several places.

The whole of this plant is of a light thin substance, dry, and looks and feels almost like fine tissue paper. It is a rare species.

XIII. AGARICUS *stipitatus, pileo hemisphaerico rugoso, lamellis
caeruleis, trifidis albidis, stipite albo.*

BLUE AGARIC.

T A B. XII.

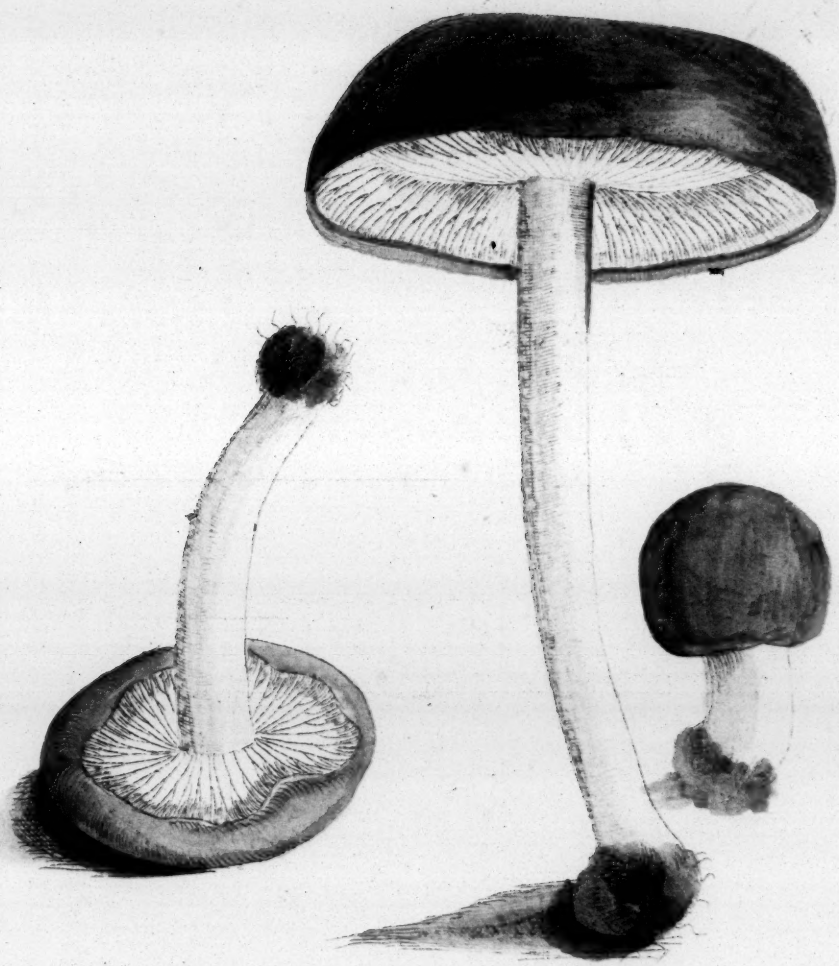
THE root consists of an irregularly compressed termination, or rather origin of the stem; it emits numerous fine dawning grey fibres: there is no volva.

The stem is upright, round, hard, and solid; the size of a swan's quill, and three inches high; it is of a dusky white colour, and has no curtain.

The gills in three series, white, gross, and brittle; they are narrow, and adhere to the stem by their base.

The pileus hemispherical, two or three inches diameter, of a greyish blue colour, and dry surface; feels like cloth made of coarse wool, is firm and hard, but yet very brittle. The substance of the flesh white and thick.

Gathered in the wood below *Wheatly*, August 16, 1786; and again in August, this present year 1787.





AGARICUS *stipitatus, pileo fusco lobato undulato, lamellis trifidis profundis carneo pallidis, stipite fistuloso griseo.* XIV. *irregularis.*

IRREGULAR AGARIC.

T A B. XIII.

THE root in this, as in most other Agarics, consists of an hard abrupt termination of the stem, emitting a multitude of fibres, of a grey colour, and a dawny, or mucor-like substance; in this species there is no volva.

The stem is round, smooth, fistular, and of a pale grey colour, easily divisible into small filaments.

The curtain is of a greyish white, thin, and of a very light and dawny texture; breaks and entirely vanishes soon after the plant appears above ground.

The gills in three series, deep, and remote; of a tough pliable substance, and a pale dusky flesh colour.

The pileus a fordid purple brown, covered with a glutinous matter, two inches in diameter, lobed, waved, and crupled in a very irregular manner; while young irregularly deflected round the margin, at all times a little beaked or elevated in the centre.

Grows in dry and barren pasture and meadow ground, about *Halifax*, in great plenty, in August and September.

- XV. AGARICUS *stipitatus pileo globoso purpureo, lamellis croceis
serratis.*

AGARIC WITH SERRATED GILLS.

T A B. XIV.

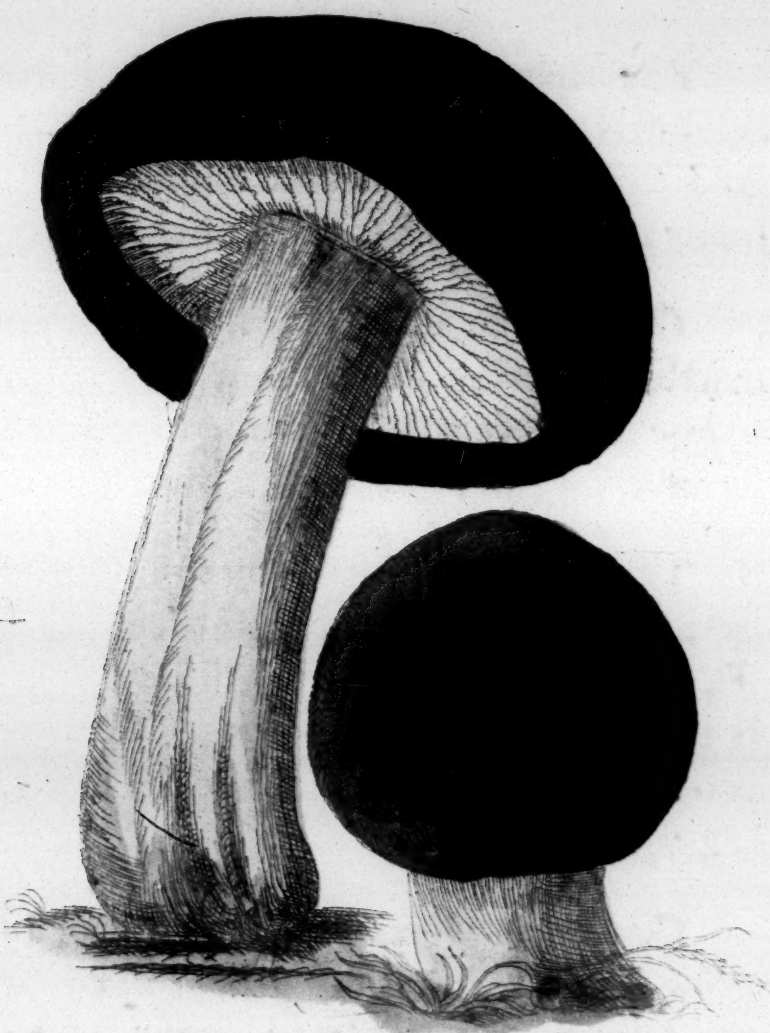
THE root is an hard blunt termination of the stem; it is of a brittle substance, and seems to adhere to the ground by its base, without visible fibres: there is no volva.

The stem is round, upright, hard, and solid; it is the thickness of one's thumb, three inches long, and of a dusky gold colour; the substance within a pale yellow, brittle, and spongy; not divisible in filaments: there is no curtain.

The gills in three series, rather remote, strong, gross, and brittle, adhering to the stem by a narrow claw; their colour is a fine gold yellow, and they are remarkable, in being visibly serrated on the edges with a brownish colour.

The pileus globular, three inches in diameter, of a bloomy purple colour; it is soft, and feels to the touch like fine woollen cloth, yet there is no visible dawn. The flesh or substance is thick, brittle, and white. The whole plant dissolves in a brown loathsome jelly, about the third day from its first springing up.

Grows in woods, but is rare. The specimen here figured grew in the plantation at *Bramham*, near *Leeds*; it grew under the trees to the left hand, when you enter the park by a footway from *Keddow-Lane-Head*, August 28, 1786.





James Bolton Del. & sculp. 1871

GROWING ABOUT HALIFAX. 15

AGARICUS *stipitatus, pileo cumpanulato fusco viscido, lamellis
trifidis albis, stipite fistuloso albo.* XVI.
concinus.

NEAT AGARIC.

T A B. XV.

THE root is a little swollen, frequently compressed, or of an irregular figure; it has a few proper fibres, and is not surrounded by a volva.

The stem is the thickness of a goose-quill, white, fistular, and of a tender delicate substance; it is two or three inches high, and has no curtain.

The gills are in three series, numerous, deep, of a thin pliable texture, closely and beautifully arranged; their colour, like that of the stem, is white.

The pileus of a dark mouse coloured brown, while young of a bell-shape, and covered with a viscid slippery fluid; afterwards becomes dry, and expands, but not so as to become horizontal: the flesh is thin and white, in decay it dissolves in a brown turgid jelly.

Grows in moist places in several woods about *Halifax*. The specimen here figured, I gathered in the *Birks*, or *Burks*, September 23, 1786.

- XVII. *AGARICUS stipitatus, pileo convexo ferrugenio, lamellis
elasticus. trifidis remotis rigidus, cortina elastica albida, stipite
inæquale.*

ELASTIC AGARIC.

T A B. XVI.

THE root is hard and tuberous, emitting numerous brown fibres, by means whereof, it takes firm hold in the ground; it sustains several plants, and is destitute of volva.

The stem is unequal in thickness, being largest near the root, and gradually tapering upwards; it is solid, firm, and elastic; of a red brown or rust colour, white within, and easily divides into thin fibres, or filaments.

The curtain is of a dead white, of a tough substance, breaks round the verge of the pileus, and remains on the top of the stem, like a little thick ruffle, for several days.

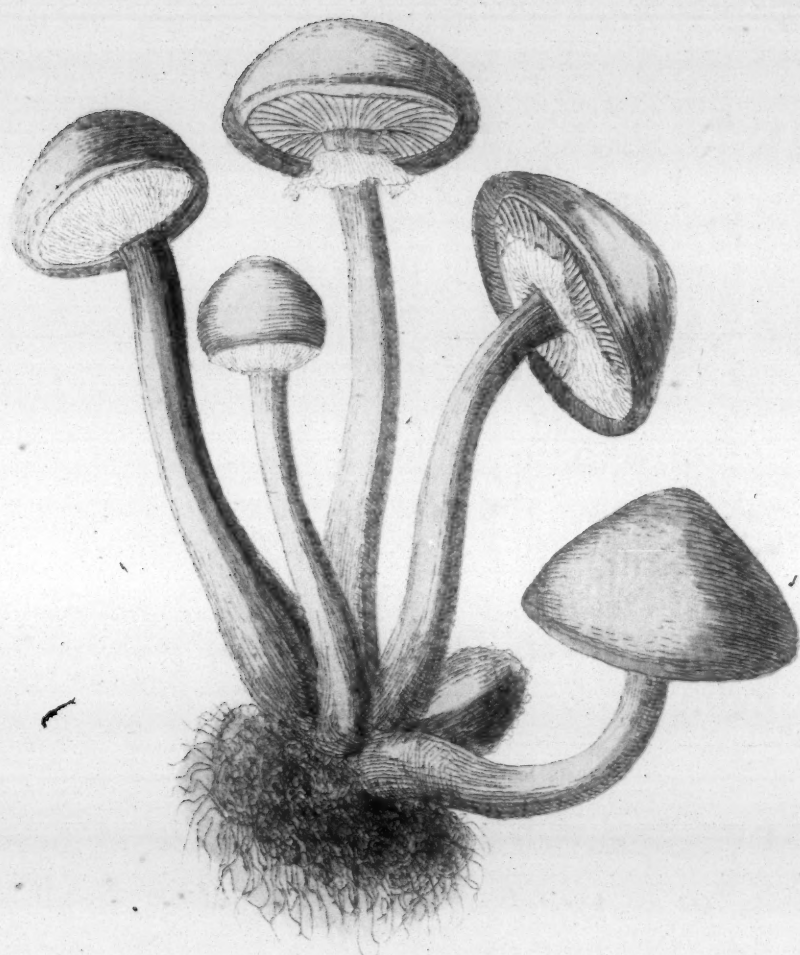
The gills are in three series, gross, tough, and remote; of a dusky white colour, and adhere to the stem by a narrow claw.

The pileus is convex, an inch in diameter, of a brownish rust, or ferruginous colour, looks and feels like woollen cloth not of the best quality, being a little harsh to the touch. The flesh is white, of a spongy elastic substance, and has a taste not disagreeable. The whole plant is of a tough leathery substance, and in decay dries and withers.

Grows in dry and barren grounds, under oak trees, in October. This specimen grew under oak trees in the Park at Fixby, in October, 1786.

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AGARICUS *stipitatus*, pileo lamellis et stipite albido, tota planta coriacea. XVIII. umbilicatus.

NAVEL AGARIC.

T A B. XVII.

THE root is a little hard tubercle, the size of a small pea, of a brownish colour, and furnished with a great number of fine short capillary greyish fibres: there is no volva.

The stem is round, cylindrical, the thickness of a duck's quill, three inches high, of a dead white colour, and of a solid, firm, tough, elastic substance; but easily splits from end to end, in white, springy, shining filaments: there is no curtain.

The gills are disposed in three series, rather broad than otherwise, remotely placed, white, and of a tough and pliable substance.

The pileus at first convex, afterwards becomes horizontal and depressed in the centre, with a cavity resembling a navel; it is from one to two inches diameter, of a white colour, a smooth surface, and a tough elastic substance. The plant is of a slow growth, and abides for weeks; in decay the colour changes from white to a yellowish brown, after which it melts in a brown liquor.

Grows in close plantations, particularly those of fir or larch, from July to October. It abounds in the plantations about *Fixby-Hall*, the seat of T. THORNHILL, Esq; The rich and extensive plantations around that rural and beautiful *Villa*, have afforded me several curious and undescribed species of British *Fungi*.

- XIX. AGARICUS *stipitatus*, pileo conico albido acuminato, lamellis
confertis. *fusco pallidis*, stipite numeroso albido.

WHITE CLUSTERED AGARIC.

T A B. XVIII.

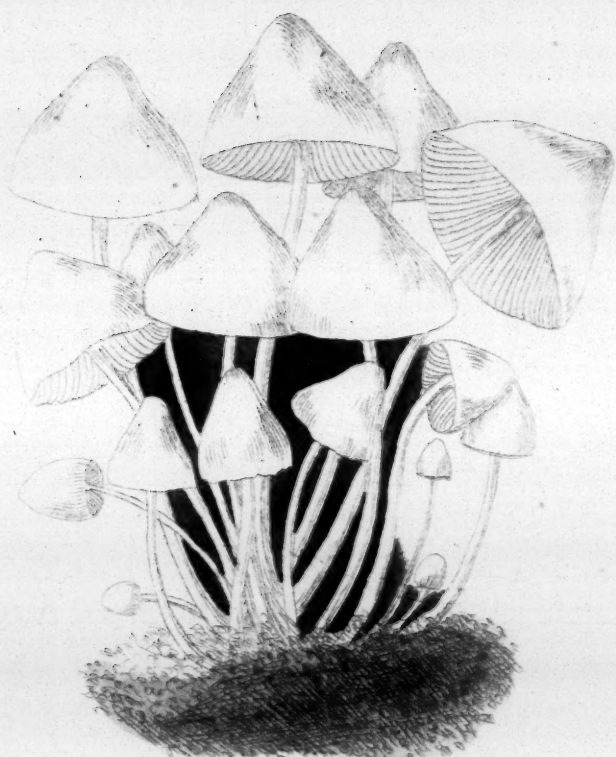
THE root is an irregular lump of a tough hard substance, emitting numerous short grey dawny fibres, it is not surrounded by a volva, and supports numerous plants.

The stem white, dry, gently tapering from the root upwards, the thickness of a swallow's quill, two inches high, of a dry light filky substance, but not fistular. There is a white dawny curtain, visible only just when the pileus first peeps above the surface of the ground.

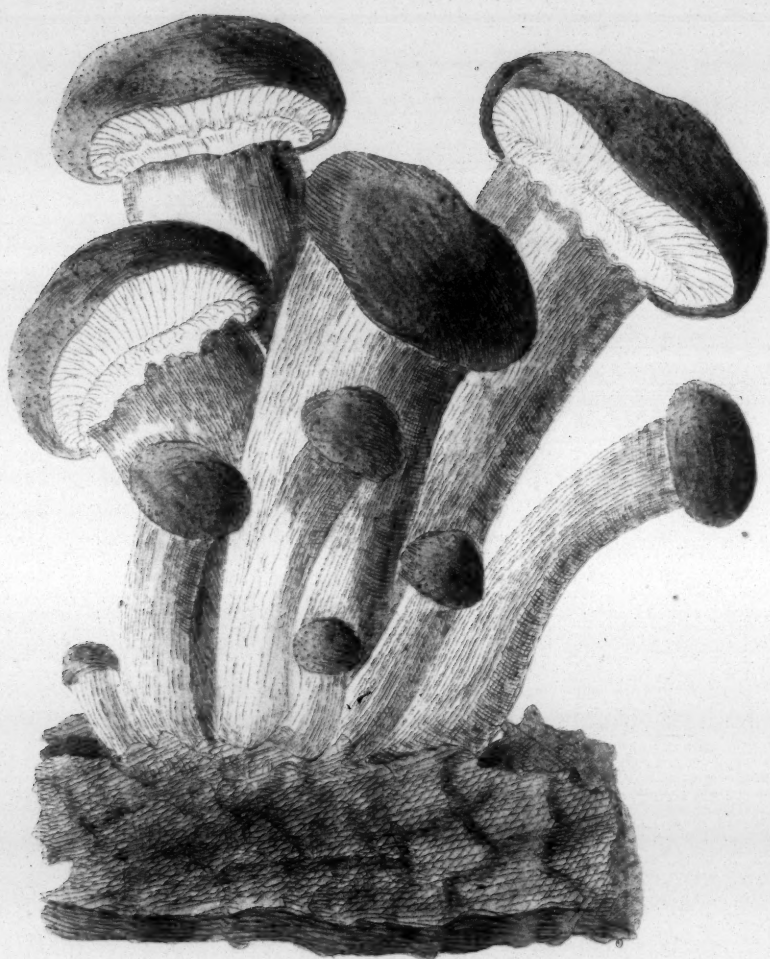
The gills are in one series, being all extended from the rim of the pileus to the top of the stem; they are closely arranged, and of a thin and delicate substance: their colour is white, with a faint tinge of pale brown.

The pileus is conical, terminating in an acute point, which point is tinged with a yellowish brown, the rest white, the surface smooth, the substance light and cottony. In large specimens it is about an inch in diameter; in decay it withers, and becomes like soft paper.

Grows amongst the Bark in hot-houses. The specimen here figured and described, grew in the Pine-Stove of J. CAYGILL, Esq; at *Halifax*, November, 1785.



James Bolton del. et sculp. 1794



AGARICUS *stipitatus*, pileo fulvo, angusto convexo, lameilis XX.
angustus crassus, stipite ramoso crasso spongioso fusco. Battara, *laricinus*.
 Tab. 11. B. C. F.

LARCH AGARIC.

T A B. XIX.

THE root consists of an irregular misshapen hard piece of matter, suited, in size and shape, to the cavities wherein it grows, as if it had been cast there in a mould; upwards it divides in several stems, which are the thickness of one's thumb, in the largest plants; the stems compress one another near the root, and are frequently united in their substance, growing out of each other, and are actually branched; the colour is a dead greyish brown, and the substance soft, spongy, and easily compressible: the root is destitute of volva.

The curtain is narrow, of a dead white colour, and a soft cottony substance.

The gills are in two series, of unequal length; they are few, narrow, gross, brittle, and white.

The pileus is fox-coloured, feels soft and clothly to the touch; its diameter is often not much more than that of the stem; it is constantly of a convex figure, and a dry, light, spongy substance; easily compressible between the fingers; and instantly, on removing the pressure, re-assumes its own form.

Grows on the bark of larch trees, when in a state of decay; it seems to take root between the wood and the bark, the latter of which it bursts to make itself way.

The specimen here figured, I gathered in a little plantation at *Lee-Bridge*, near *Halifax*; where I have seen the plant every Autumn, for several years past.

- XXI. *AGARICUS stipitatus, pileo campanulato plicato atro, stipite
pullatus. longo ventricoso albido. Fungus pileolo campanulato vertice
levi, &c. Mich: Gen: p. 189, t. 80, fig. 5.*

MOURNING AGARIC.

T A B. XX.

THE root consists of a few grey dawy fibres, furrounding the bottom of the stem, and extending themselves on the surface of the matter wherein it grows, for a small space, round about.

The stem is seven or eight inches high, of a silver white, fistular, and swelling towards the lower part, just like the seedling stem of an onion; it is of a very tender substance, and easily divides in white silky tender filaments.

The pileus and gills seem to be inseperable, or united in one substance; they are plaited like a fan. The substance tender, watery, pellucid, of a pale colour, but thickly covered with a black glutin, or moist powder, which dissolves on being touched. The weight of the pileus, and weakness of the stem, makes it very difficult to take up the plant without breaking the neck of the stem; as is expressed in one of the figures.

Grows in the space of a night, and falls and dissolves the following day. The specimen, from which I took the figure, dissolved in the time of drawing into a black viscid liquor, which, when dry, lay like a footy powder on the table, June 22, 1786.

Grows on dunghills, or in fat meadows. The pileus at its first appearance, is covered with a grey dawy volva, which soon vanishes.



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J. B. Smith

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From the same locality from Nature by John Dutton at Hildesheim 1878

AGARICUS *stipitatus*, pileo planiusculo lactescente margine
deflexo, lamellis ramosus pallidis. XXII.
piperatus.

WHITE PEPPER AGARIC.

T A B. XXI.

THE root consists of a few short fibres, adhering to the bottom of the stem, which terminates in an obtuse point: there is no volva.

The stem is white, smallest above and below, swollen in the middle, where it is an inch or more in diameter; the surface is smooth, and the substance firm, solid, hard, and very brittle: there is no curtain.

The gills are extremely numerous and irregular; their central extremity just touches, scarce adheres to, the top of the stem; they are narrow, and of brittle substance; of a very pale milk colour, and exhibit no proper arrangement, the shorter being united unto the longer, or issuing from them in a branched order; some are entire for their whole length, others are divided and subdivided in a dichotomous order, as in the *Agaricus chanterellus*.

The pileus is white, smooth, hard, and brittle; at first much deflected round the rim, afterwards becomes horizontal, and at last funnel-shaped. When either the pileus, gills, or stem are wounded, there issues out a milk, of an hot peppery taste, and leaves a disagreeable sensation on the tongue for some hours.

Grows in woods about *Halifax*.

This is the true Pepper Agaric, found by Dr. LISTER in *Morton* woods, under *Pinno-Moor*, *Craven*. See *Raii: Syn: p. 5*. There is another Agaric, with which this seems to have been confounded, as will appear in the course of this work.

XXIII. AGARICUS *stipitatus*, *pileo sordide flavo, lamellis luteo rufis.*
cinnamomeus. Sp: Pl: 1642.

Agaricus stipitatus, pileo convexo rufo lamellis flavescentibus, stipite longo flavo. Hudson, 615, 18.

BROWN AGARIC.

T A B. XXII.

THE root is hard, brown, compressed or flat; sometimes irregularly distorted, emits brown hard fibres, and takes firm hold in the ground: it is not surrounded by a volva.

The stem is smooth, smallest near the root, gradually increasing upwards; while young it is solid, but becomes fistular afterwards; the substance is tough, and easily divided into slender filaments; the colour is a yellowish brown; it is three or four inches high: there is no curtain.

The gills are in three series, deep, of a soft pliable substance, and of a pale yellowish cinnamon colour; comparatively they are few in number.

The pileus is at first convex and waved round the margin, afterwards it becomes horizontal, and more sensibly waved and undulated; and at last the rim becomes so much elevated, as to give the pileus a funnel shape, but with a gentle elevation in the centre. The surface is smooth, feels like vellum, and is of a cinnamon colour; the whole plant is of a tough pliable substance, and continues for several days.

Grows in woods about *Halifax* abundantly; greatly varying in size, according to soil and situation.



James Bolton del. et sculp. A 1789



AGARICUS *stipitatus*, pileo campanulato subfusco squamato, lamellis albidis, stipite bulboso anulato. Lightfoot's Flora Scot: 1025. Agaricus (*procerus*). Hudson's Flo: Ang: 612, 10. XXIV. annulatus.

RUFFLED AGARIC.

T A B. XXIII.

THE root is bulb-shaped, of a soft and spongy substance, about the size of a pigeon's egg, and sends out numerous proper fibres: there is no volva.

The stem is upright, smooth, round, and gradually tapering from the root upwards; it is white, fistular, and has a fine dawn in the perforation; the substance soft, elastic, and easily divisible in soft silky filaments; the colour is white at first, but afterwards changes to a pale straw colour. It is five or six inches high.

The curtain is a little tough, white, separates from the rim of the pileus, abides on the stem like a ruffle, and is moveable upwards and downwards, by means of a central ring, to which it adheres, and in which it seems to originate.

The gills in two or three series, of various irregular lengths, numerous, thin, and deep; at first gently tinged with a light rose colour, as in the common mushroom, next they become white, and lastly of a pale brown.

The pileus is at first of a globular figure, afterwards becomes conical, or bell-shaped sometimes beaked at the vortex, with a little prominence, the size of a sleeve button; when full grown is wide expanded round the rim, and approaches to an horizontal position; changes from white to a pale brown, and is covered with soft brown scales, which are not the fragments of a volva, as in the *Agaricus muscarius*, but grow from the substance of the pileus.

Grows in the dry parts of woods about *Halifax*, in October, but not plentifully.

- XXV. *AGARICUS stipitatus, pileo campaniformi albido lacero, lamellis
extinctorius. niveis, stipite subbulbofo subulato nudo. Linn: Flo: Suec:
1196. Sp: Pl: 1643. Hudson Angl: 617, 29.*

EXTINGUISHER AGARIC.

T A B. XXIV. .

THE root is a little swelled, hard, white, and emits brown fibres from the sides; sometimes it sustains several plants, sometimes only one: it is not surrounded by a volva.

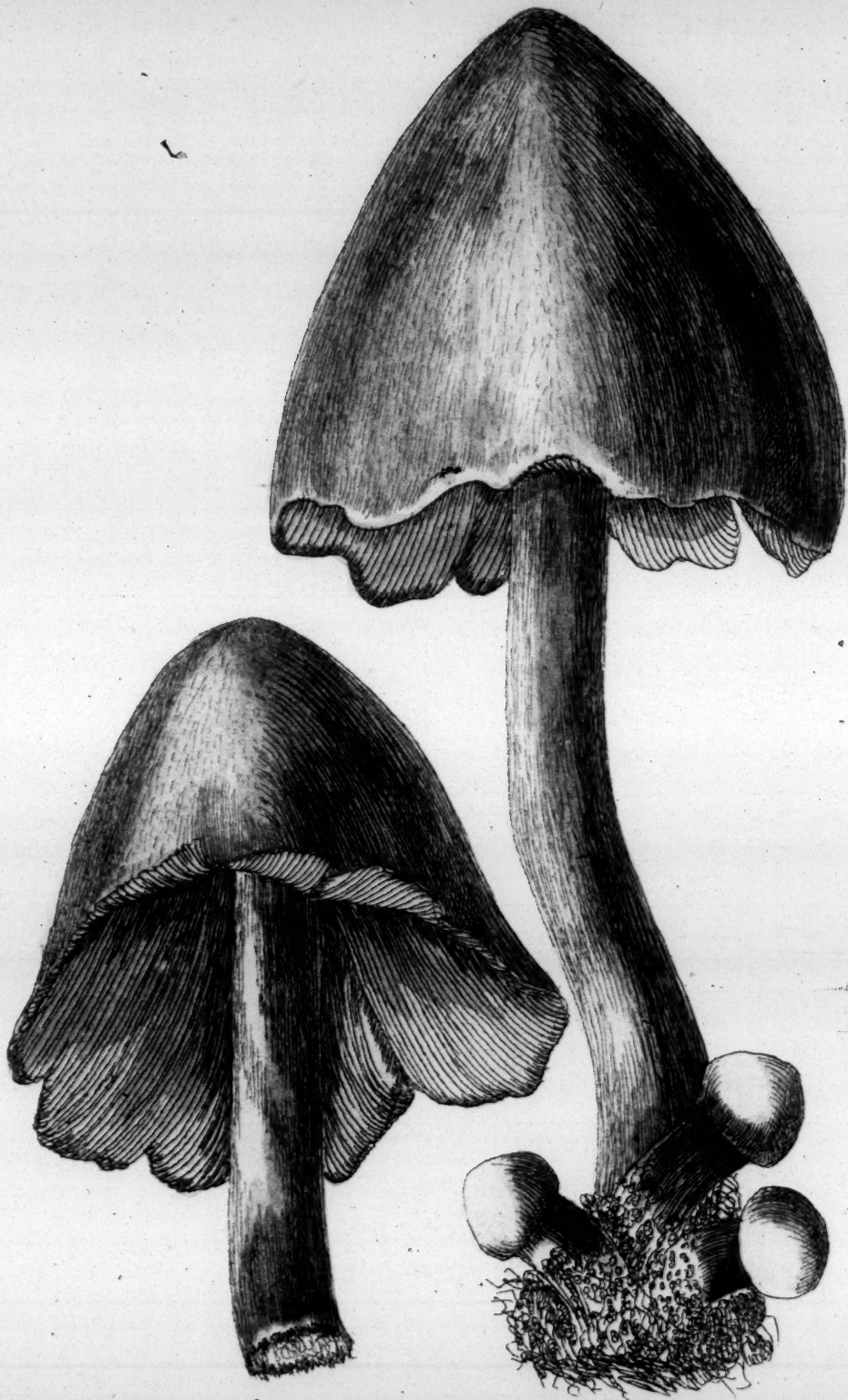
The stem is cylindrical, smooth, white, fistular, with a small perforation, wherein is a soft dawny matter like cotton; it is an inch in circumference, and five inches high: there is no curtain.

The gills are in one series, extremely numerous, thin, deep, and delicate; of a pure white colour at first, afterwards turn to a pale brown, and in decay dissolve in a dark brown liquor. Their great number makes the pileus heavy as in the *Agaricus familiaris, plicatus, luridus, &c.*

The pileus is shaped like an extinguisher, terminating bluntly above, and spreading out at the rim, where it is a little waved and undulated; the surface is smooth while the plant is young, afterwards becomes striated, and at last lacerates and dissolves. The colour is white at first, except a gentle tinge of brown near the top, as it advances in age, the white changes to a very pale brown; and in some specimens there are a few dawny scales or tufts of a pale brown, as in the *Agaricus familiaris*.

Grows amongst sand, in moist and shady situations about *Halifax*, but is rare there.





James Bolton delit Sculp^t. 1787 at Halifax

AGARICUS *stipitatus*, pileo conico griseo viscido, margine inæquale, lamellis integris profundis sordide cæruleus, stipite solida arcuata. XXVI. *luridus.*

FOUL AGARIC.

T A B. XXV.

THE root is hard and misshapen, of a dirty brown, emitting many fibres, sustaining one or more plants, and is destitute of volva.

The stem is hard, solid, crooked, or bent in various directions; it is about the thickness of one's little finger, of an ugly pale litter-colour, and four inches high: there is no curtain.

The gills are in one series, extended from the rim of the pileus to the centre, but do not adhere to, or even touch the stem; they are extremely numerous, and very closely arranged; they are deep and large, rendering the pileus heavy by their great number; they are of a disagreeable sordid greyish blue, and in decay dissolve in a brown stinking fluid.

The pileus irregularly cone-shaped, diameter of the base two inches and a half, height from the base to the top about the same measure; it is of a kind of dusky greyish hue, with a cast of dirty olive colour; is quite smooth, and covered with a thick slippery loathsome half-congealed fluid. The margin is lobed, and sinuated in an irregular manner; the lobes and hollows being very unequal and sometimes separated by deep gashes.

Grows on *Gibbet-Hill*, and in some other places near *Halifax*.—It differs from the *A. striatus*, as will be seen hereafter.

In this species we frequently find several young plants adhering to the root of a full grown one.

XXVII. AGARICUS *stipitatus*, *pileo conico*, *subfusco lacerato squamoso*,
domesticus, *lamellis integris griseo pallidis*, *stipite fistuloso albido*.

DOMESTIC AGARIC.

T A B. XXVI.

THE root consists of a great number of dawny grey fibres, some of which insinuate themselves into the substance of the putrid wood, whereon it grows; the rest creep like mouldiness upon its surface. The plants most commonly grow in bundles from the same root.

The stem is white, and shines with a silky gloss; it is fistular, of a thin light substance, the thickness of a goose-quill, and three or four inches high; it easily divides in white glittering filaments, and often abides after the pileus is fallen.

The curtain is extremely delicate, and vanishes as soon as the rim of the pileus begins to separate from the stem.

The gills are in one series, numerous, broad, and deep; at first of a pale grey colour, but in decay dissolve in a black inky liquor.

The pileus is at first of an oval figure, and wrapped up in a volva which is peculiar to itself, and does not inwrap the root. The volva is of a cottony substance, and a very pale grey brown colour; as the pileus increases in bigness it bursts in fragments, and remains like warts on the surface. From an oval, the pileus changes to a conical figure; the margin undulated, next becomes bell-shaped, and at last lacerates and dissolves.

Grows on decaying pieces of moist wood, in cellars, cold kitchens, &c. in plenty.





J. Bolton del. et sculp.

1787

AGARICUS *stipitatus*, lamellis dimidiatis solitariis, stipite XXVIII.
volvato, apice dilato, base ovato. Sp: Pl: 1640, 4. muscarius.

Agaricus caulescens pileo sanguineo verrucis, lamellisque albis,
stipite albo basi globoso. Flo: Lapp: 595. Hudson Angl:
612. Lightfoot Fl: Scot: 1010, 3.

FLY AGARIC.

T A B. XXVII.

THE root is large, and bulb-shaped, of a soft spongy substance, and together with the young plant surrounded by a thick volva, when the stem begins to shoot, the volva breaks, and the pileus appears; as it advances in growth, the bulb at the root diminishes in size, and is often nearly exhausted in full grown plants

The stem is white, brown, or reddish; soft, spongy, and, while the plant is young, solid; afterwards becomes fistular, the thickness of one's thumb, and four or five inches high.

The curtain, after it has performed its office, is separated from the pileus all round the rim, without being torn, and remains for some time on the stem, like an elegant white ruffle.

The gills are in two series, most of them extended from the stem to the rim of the pileus, but are interspersed with others extending but half way; they are white.

The pileus, at its first eruption from the volva, is of a globular figure, smooth and shining, with a slippery glutin; when full grown becomes horizontal, and the surface nearly flat; it is of various colours, but generally tinged, more or less, with red. In dry seasons, or improper soils, the volva does not separate from the pileus, but remains in broken fragments, like warts, upon its surface.

Grows in dry woods about *Halifax*, from August to October.

XXIX. *AGARICUS stipitatus, pileo crasso hemispherico sabluteo viscido,*
elephantinus. lamellis trifidis crassis fragilis subalbidis, stipite albo crasso
spongioso.

ELEPHANT AGARIC.

T A B. XXVIII.

THE root consists of a few fibers, which issue from the bottom of the stem: there is no volva.

The stem is upright, solid, large, and of a fair white colour; it is six inches in circumference; and about four inches high; the substance is soft, spongy, and easily compressible; the figure approaches to an oval, being broadest in the middle, and narrow above and below. When the plant grows old, the stem becomes cylindrical, hard, of a dark colour, and hollow within: it has no annulus or curtain.

The gills are arranged in three series, they are deep, remote, extremely gross, (being a line in thickness) brittle, and appear like wax of a very pale kind of whitish tallow colour.

The pileus, at its first appearance, is globular, and inwraps the whole of the plant, except the radical fibres: for its margin or rim surrounds and embraces the bottom of the stem, and by this means serves the same purpose as a volva in some other Agarics; afterwards it acquires an hemispherical figure, is covered with a viscid liquor, and is of a yellowish clay colour. In decay the pileus becomes irregularly horizontal, lacerates, becomes dry, changes to dark colours of various hues, and seems as if a considerable degree of fire had passed upon it.

Grows in the dry part of woods about *Halifax*, in October, and, if the season is dry, abides several weeks in the state represented in the upper figure, *plate 28*.



29



AGARICUS *stipitatus*, pileo convexo luteo, lamellis virescentibus, XXX.
stipite flavo. Hudson Angl: 615, 20. Fungus mediæ magnitudinis pileolo superne rufo flavicante, lamellis subtis sordide virentibus Raii: Syn: 10, 57. fascicularis.

BUNDLED AGARIC.

T A B. XXIX.

THE root is a mishapen piece of fungous matter, large in proportion to the number of plants it sustains, emits a few fibres, is of tough substance, destitute of volva, and sustains numerous plants, from three to fifteen.

The stem curved, growing at first horizontally, and then rising gradually upwards; it is about the thickness of a swan's-quill, fistular and three inches high; it is of a dusky yellow colour, with a tinge of green, and thinly covered with a dawy kind of filaments.

The curtain is of a pale yellow, slender and delicate as the finest spider's web: found only when the plant is just sprung up, breaks, and vanishes when the verge of the pileus begins to unfold.

The gills are extremely thin and numerous, they are narrow of a soft pliable substance, and greenish olive colour; they adhere lightly to the stem by a narrow claw.

The pileus from one to two inches diameter, smooth, of a pale yellow, near the margin, growing stronger near the top, where it is of an orange or scarlet colour; the top or central elevation, is not always in the middle, but bears to one side, which gives the pileus the figure of a nipple shell. In decay the whole changes to a dirty brown, and dissolves in the space of five or six days from its first springing up.

Grows on putrid wood, or on the ground amongst timber in wood-yards, or near the roots of trees, about *Halifax*, in August and September, plentifully.

XXXI. AGARICUS *stipitatus*, pileo convexo viridi lamellis fuscis befidis,
politus. cortina glauco griseo, stipite brevi.

/ GREEN POLISHED AGARIC.

T A B. XXX.

THE root is hard, firm, obtuse, and covered with numerous grey dawy fibres: there is no volva.

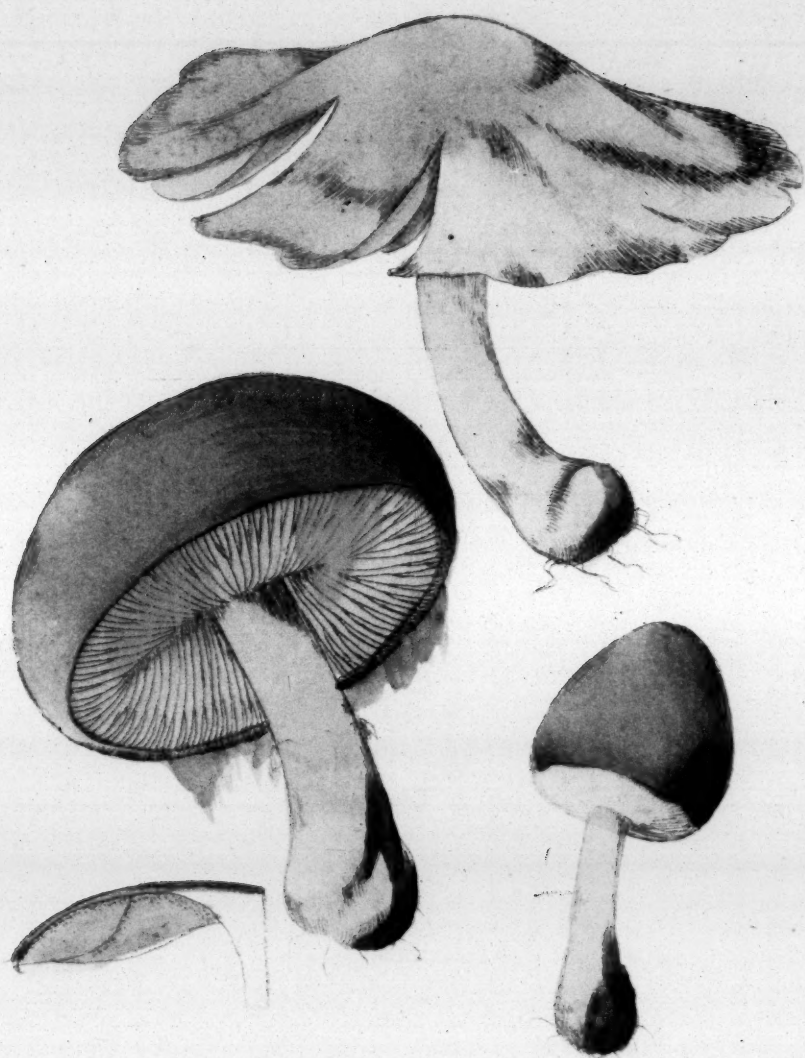
The stem is round, hard, firm, solid, and an inch and a half high; it is of a warm brown, or ferruginous colour, and rather diminishes in thickness from the bottom upwards.

The curtain is of a greyish pale blue green, on the outside, and seems covered with a glaucous dust; on the inside it is the same colour as the gills: it abides in fragments on the stem, and on the rim of the pileus, for a little while after its breaking.

The gills are in two series, not adhering to the stem; they are deep, and of a pretty ferruginous brown; they are numerous, and of a thin pliable substance.

The pileus is at first egg-shaped, then becomes hemispherical, afterwards spreads out at the verge, and lacerates; it is two or three inches diameter, and of a beautiful bright blueish green; at first it is covered with a glutin, or gummy fluid, which when dry acts like rich varnish, and gives an excellent shining glossy polish to the surface. In decay the colour fades, and the plant dissolves at the age of eight or ten days.

Grows under fir trees in the plantations about *Fixby-Hall*, and elsewhere. It takes root amongst the fallen leaves, just as the *Hydnum auriscalpum* does, on the decaying cones; I never met with it growing in any other kind of soil.





AGARICUS *stipitatus*, pileo campanulato striato pellucido, XXXII.
lamellis adscendentibus, stipite nudo. Sp: Pl: 1643. Hud- *campanulatus.*
son Angl: 618, 31.

BELL AGARIC.

T A B. XXXI.

THE root is a little brown bulb, emitting brown fibres from its bottom and sides.

The stem is cylindrical, fistular, transparent, of a whitish grey colour, the thickness of a swallow's quill, and five or six inches high.

The curtain is very delicate, vanishes when the plant is about an inch high, but leaves a black vestige on the stem, which abides for a little time, and then disappears.

The gills are in two series, narrow, thin, transparent, and of a grey colour, changing black in decay.

The pileus is at first conical, smooth, and brown, afterwards the rim begins to diverge, and to appear dimly striated, with fine tender lines; the next stage a black ciliation begins to appear round the rim, and as it advances in growth the pileus expands, and what before appeared to be stria, are now found to be actual plaits, the angles whereof are alternately brown and lead-coloured; the black ciliation is divided into little tufts, which adhere to the extremities of the brown angles, and give a pretty appearance to the rim of the pileus. It is about an inch and a half in diameter, of a tender watery substance, and semi-transparent; in decay it dissolves in a brown liquor. It grows up in one night, and perishes the next day.

Grows in meadows where the soil is rich, in September and October, about *Halifax* plentifully.

XXXIII. AGARICUS *stipitatus albus, pleo plicato membranaceo, stipite*
androsaceus. nigro. Sp: Pl: 1644. Hudson Angl: 621, 44. Lightfoot
Flo: Scot: 1027, 19.

BLACK STALKED AGARIC.

T A B. XXXII.

THE root consists of a few imperceptible fibres, which in-
 sinuate themselves into the substance of such decayed ve-
 getable matter, as afford proper nourishment to the plant.

The stem is one or two inches high, hard, black, and
 shining; from the thickness of a horse's hair to that of a large
 hog's bristle, either of which, in substance and in touch, it not
 unaptly imitates. It often remains for a considerable time after
 the pileus is fallen.

The gills are few, narrow, and remote; they are of a pale
 dusky white, while the plant is young, but change to brown
 afterwards.

The pileus is at first conical, and white, afterwards spreads,
 becomes almost horizontal, and about half an inch in diameter;
 the colour changes to brown, pale near the margin, darker in
 the centre; it is sometimes striated and constantly of a thin,
 dry, membranous substance. In decay it withers and falls off.

Grows on putrid leaves, chiefly those of oak, in the shady
 moist parts of woods about *Halifax*; it also grows on moors,
 among rushes. I saw it in great abundance, in September, this
 year 1787, on the hill above *Causey-Foot*, near *Halifax*; it grew
 upon the stalks of decayed rushes, in the place where the
Trientalis europæa, and the *Ophrys cordata* grow.





AGARICUS *stipitatus*, *pileo hemisphaerico plumoso murino*, XXXIV.
lamellis trifidis albidis stipite longo plumoso. *plumosus.*

FEATHERED AGARIC.

T A B. XXXIII.

THE root is round, hard, the size of a pea, of a brownish black colour, and emitting a few long hard fibres: it is not surrounded by a volva.

The stem is hard, solid, cylindrical, often bended or waved, the thickness of a duck's quill, and about four inches high; it is closely covered with small dawy or feathery tufts, of a perfect mouse-colour: there is no curtain.

The gills are in three series, deep, and terminate in a claw at the base, which just touches the top of the stem; they are numerous, soft, flexible, white, and of a dry light substance.

The pileus is hemispherical, an inch and a half in diameter, of a perfect mouse-colour, and, like the stem, thickly covered with little tufts of a dawy matter, which grow from its surface, and are of the same colour with it; there is a beautiful fringe, of the same dawy, all round its margin. The substance is thin, light, dry, and flexible: it withers in decay.

This curious and beautiful Agaric, I gathered in a little steep wood, belonging to the farm called *Ramsden*, in the township of *Ovenden*, near *Halifax*, August, 1787; it grew in plenty there.

XXXV. AGARICUS *stipitatus*, pileo infundibulo murino, lamellis sessilibus
infundibuli-
formis,
ramosus griseus.

FUNNEL-SHAPED AGARIC.

T A B. XXXIV.

THE root is little thicker than the bottom of the stem; it is obtuse hard, tough, and emits many short fibres: there is no volva.

The stem is about two inches from the root to the gills; it is often flat, and more or less depressed in longitudinal hollows, with alternate ridges; it is fistular, or hollow, quite from the root, and runs insensibly into the pileus, as the tube of a *convolulus* does into its limb—so that the upper surface of the plant is a continuation of matter, the same in substance and colour, from the verge of the pileus down to the root. The substance is thin, pliable, tough, and elastic; the surface a little glossy, feels to the touch like vellum, and is of a greyish mouse-colour. In some young specimens there is a kind of membrane, or a continuation of the surface extended over the opening of the top of the stem, which is represented in one of the half-figures, on the plate.

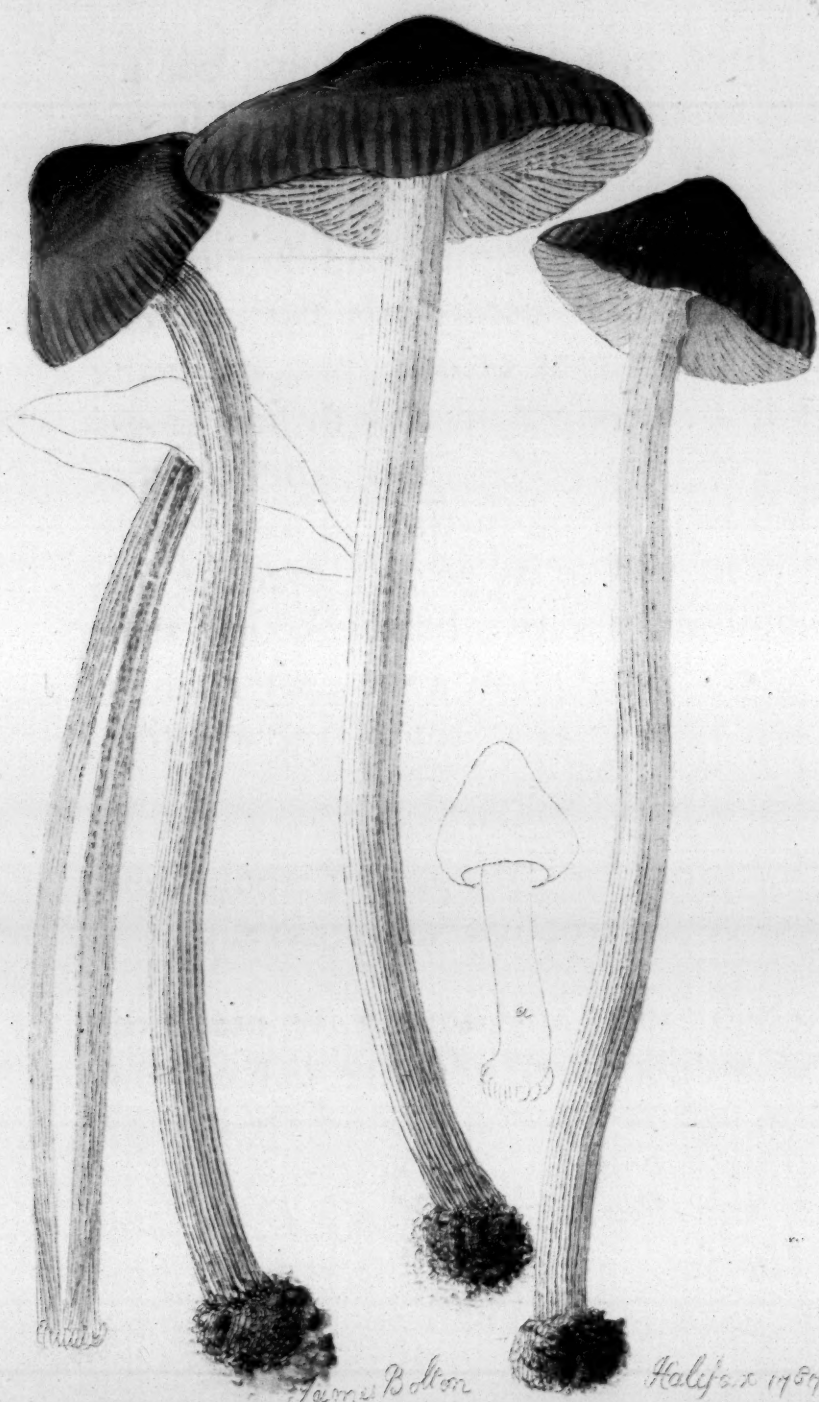
The gills are equal, and seem to be of the same substance as the plant: they are branched like nerves, as in the *Agaricus chantarellus*; and are of a kind of silvery grey colour.

This Agaric I found in *Lee-Bank-Shroggs*, in October, 1786; it has been brought to me, from several other places, by my friends.

This plant seems to connect the *Agaricus chantarellus* with the *Peziza cornucopioides*, equally partaking of the one and of the other.



Jan. 1846



James Bolton

Halifax 1784

AGARICUS *stipitatus*, pileo conico, margine undulato striato, XXXVI.
lamellis trifidis aurnticarneis, stipite fissa longa minute striata. fissus.

SPLIT-STALKED AGARIC.

T A B. XXXV.

THE root is a round, hard tubercle, of a brown colour, furnished with numerous short dawning fibres; and is not surrounded by a volva.

The stem is the thickness of a goose-quill, and four or five inches high; it is fistular, and most commonly flat or compressed. It appears to be of a pale grey colour, but on being closely examined, is found to be neatly striped with fine longitudinal stripes, alternately, of a mouse-colour and a silky white, and as fine almost as hairs. It is further remarkable in this, that when the plant is arrived to its perfect state, it frequently splits from top to bottom, the two halves rolling their edges together, and forming each an hollow tube; after which it abides for several days, and appears as if the pileus was supported upon two stems: there is no curtain.

The gills are arranged in three series, deep, numerous, thin, flexible; and of a colour between carnation and orange.

The pileus from one to two inches in diameter, striated near the margin, where it is of a dusky kind of olive colour, but brown at the apex.

Grows in the *Sbroggs*, the *Burks*, the *North-Dean*, and several other woods about *Halifax*, as I have observed this year 1787.

XXXVI. AGARICUS *stipitatus, pileo convexo, lamellis trifidis profundis, stipite longa, tota planta ruberrimo.*
rubeus.

RED AGARIC.

T A B. XXXVI.

THE root consists of a great number of short dawny fibres, connected to the bottom of the stem: it is not surrounded by a volva.

The stem is hard, solid, generally curved or bent; it is swollen near the bottom, elsewhere equal, and about the thickness of a goose-quill; it is four or five inches high, and of a strong bright red, as are all the other parts of the plant: there is no curtain.

The gills are in three series, deep, regularly and beautifully arranged; they are thin, transparent, and, when seen between the eye and the light, are of a bright and glowing ruby colour.

The pileus is an inch and a half in diameter, opaque, and of a fine dark red; it feels cottony to the touch, but there is no perceptible dawn.

This Agaric I saw growing in several places in a little range of wood, belonging to *Shibden-Hall*, near *Halifax*, October 29, 1786; where I gathered the five specimens which are exactly figured on *plate 36*.—I never met with it elsewhere.





37

AGARICUS *stipitatus*, pileo campanulato membranaceo, lamellis
trifidis albidis pellucidis, stipite longissimo pellucido albido. XXXVIII.
tenuis.

SLENDER AGARIC.

T A B. XXXVII.

THE root consists of numerous white dawny fibres, which
 infirmate themselves into the substance, or spread upon
 the surface, of decaying leaves, sticks, and other vegetable sub-
 stances: there is no volva.

The stem is equal, smooth, white, pellucid, the thickness
 of a small pack-thread, and six inches high; it is extremely
 tender and brittle, breaks and dissolves on being touched: there
 is no curtain.

The gills are few, arranged in three series, very thin and
 delicate, white, and of a pellucid watery substance.

The pileus at first conical, afterwards bell-shaped, smooth,
 pellucid, and of a watery white, except the apex, which is
 tinged with a pale brownish moule-colour; the surface is
 smooth and plain till the plant begins to decay; it then appears
 striated round the rim, and presently falls and dissolves.

Grows in the deep, moist, and shady parts of woods, where
 the air is still and calm; particularly, in a little wood above
Lee-Bridge, near the *Brook*, below *Burks-Lane*, near *Halifax*.
 The specimen above described, was gathered there, in the be-
 ginning of September, 1783. I have seen it in *Woodhouse-*
Wood, *North-Dean*, and several other like places.

XXXIX.
trilobus.AGARICUS *stipitatus*, pileo fulvo, margine, striato, lamellis
omnibus æqualibus, stipite basi volvata.

TRILOBATE AGARIC.

TAB. XXXVIII. FIG. II.

THE root is swollen, and of a bulbous figure; is soft, and of a pale kind of orange colour: it is inclosed in an elegant volva, of the same colour, which is divided almost to the centre in three lobes or segments. It is of a soft dawy substance, the thickness of glove-leather, and feels between the fingers to be of a substance similar thereto. It is permanent, abiding till the decay of the plant.

The stem grows gradually smaller from the root upwards, while young it is solid, round, and smooth; when old becomes fistular, but with a dawy matter in the perforation; it is of a pale kind of cinnamon colour, and four inches high: there is no curtain.

The gills are in one series, rather remote, deep, not adhering to the stem, narrow at the base, increasing in breadth to the extremity, where they are broad, and terminate obtusely: they are of a pale cinnamon brown.

The pileus is smooth, striated near the margin, three inches diameter, and of a beautiful bright brown, inclining to an orange colour.

Grows in the dry parts of woods about *Halifax*. The specimens here figured, I gathered in *Ramsden*, August 31, 1787.

XL.
lateo albus.AGARICUS *stipitatus parvus*, pileo conico striato flavo, lamellis
trifidis albis, stipite filiformia.

YELLOW AND WHITE AGARIC.

TAB. XXXVIII. FIG. I.

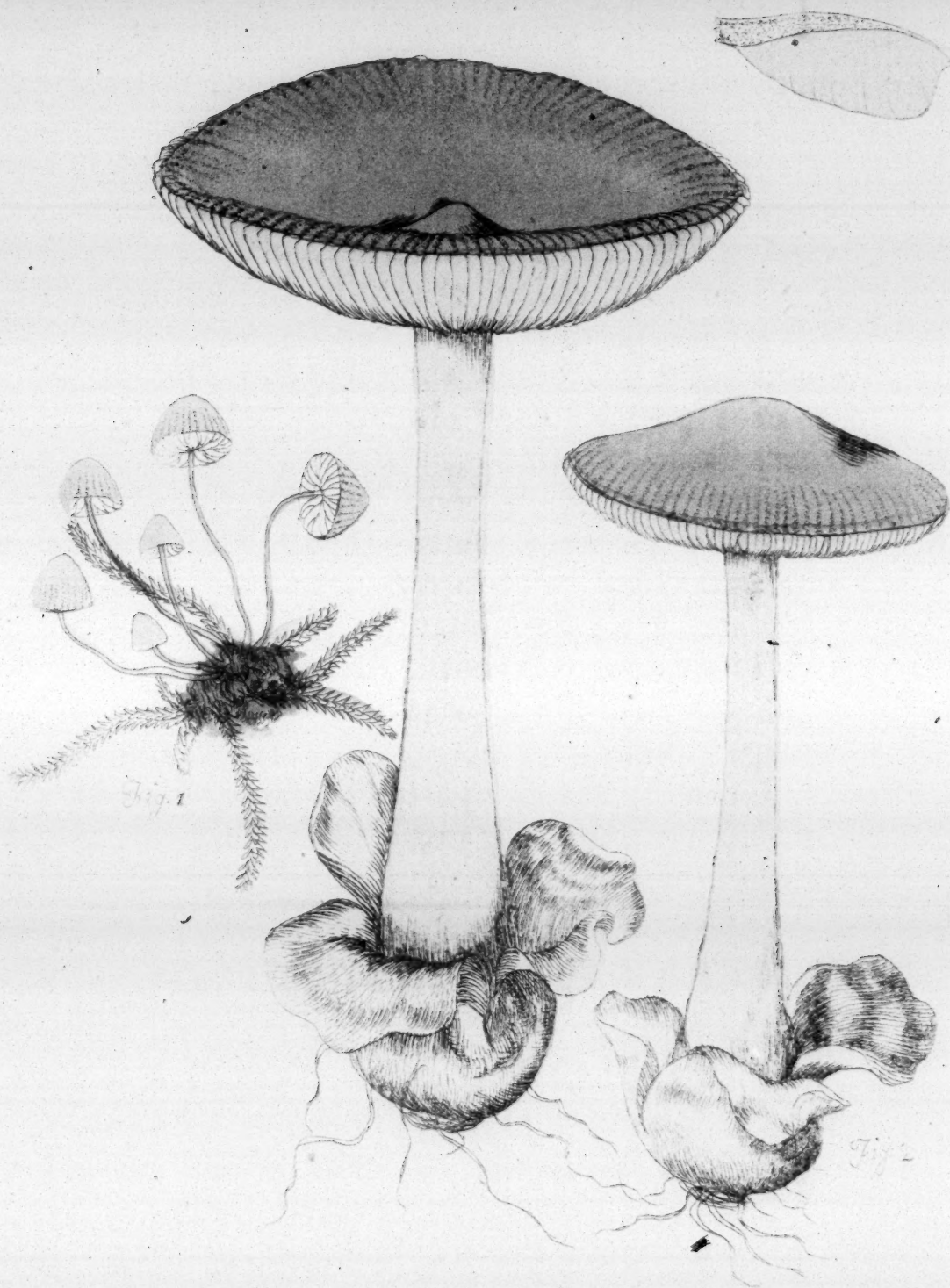
THE root consists of a few fibres, by which it adheres to decayed plants; particularly mosses of various kinds,

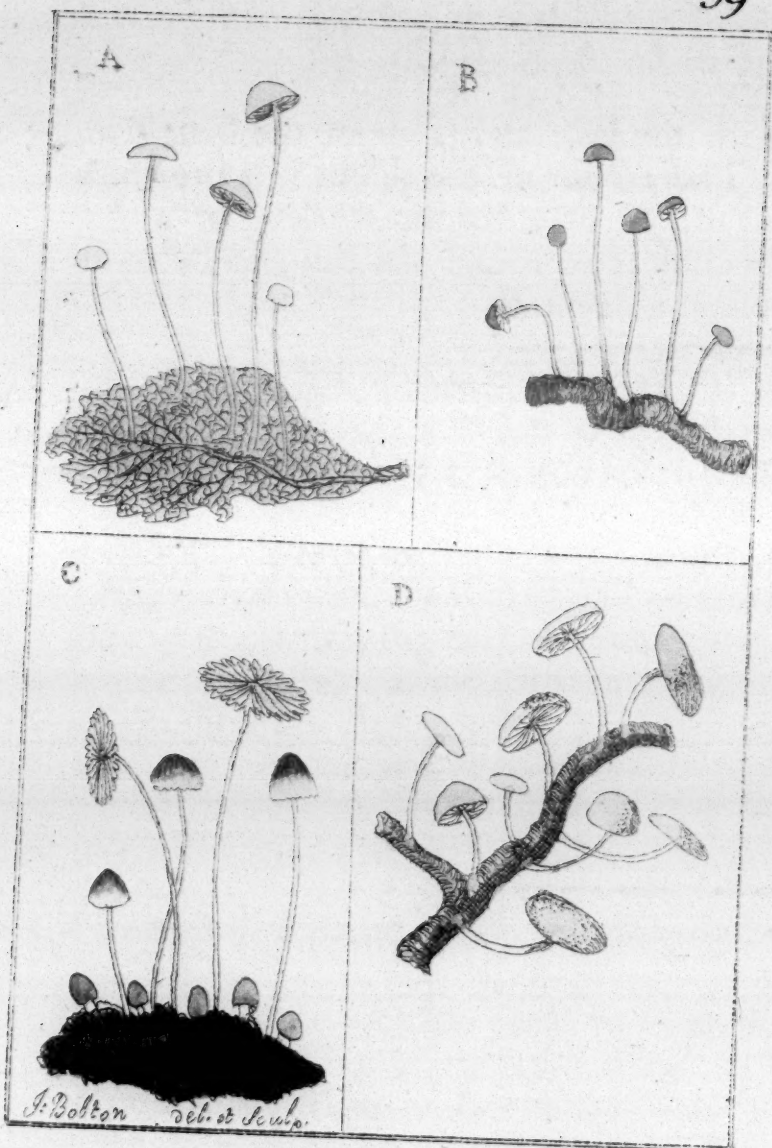
The stem is the thickness of an hog's bristle, of a pale yellow, and an inch high.

The gills are white, deep, and arranged in three series.

The pileus of a pale yellow, conical, and striated.

Grows common in woods near *Halifax*.





AGARICUS *stipitatus*, pileo plicato membranaceo, lamellis basi latioribus. XLI.
 Sp: Pl: 1643. Lightfoot, Scot: 1026, 18. Hudson, Angl: 261, 24. *umbelliferus*

UMBRELLA AGARIC.

TAB. XXXIX. FIG. A.

THE Root consists of dawy fibres, adhering to decayed leaves, &c.
 —The stem an inch high, very feeble and delicate; of a pellucid watery substance.—The gills in one series, very delicate, broadest at the base, and white.—The pileus the size of an hemp-seed, white, and gently striated.—Grows in damp woods common about *Halifax*.

AGARICUS *stipitatus*, pileo luteo convexo striato, lamellis stipitaeque albis. Sp: Pl: 1644, Hudson Angl: 622, 45. Lightfoot, Scot: 1027, 20. XLII.
clavus.

PIN AGARIC.

TAB. XXXIX. FIG. B.

IT grows in similar places with the last, and is about the same size, but of a firmer substance. The colour of the pileus is a brownish yellow, sometimes orange-coloured, or of a bright scarlet; of a dry opaque substance, and generally contracted round the rim; in decay it withers, and abides for some days in a dry state.

AGARICUS *stipitatus*, pileo hemisphaerico, lamellis stipitaeque albis. XLIII.
 Hudson Ang: 620, 39. *candidus.*

WHITE AGARIC.

TAB. XXXIX. FIG. D.

THE root consists of dawy fibres, by which it adheres to the fallen and decaying stalks of plants.—The stem half an inch in length, soft flexible and of a dead white colour.—The gills white, dry, and flexible.—The pileus of a dead white, at first conical, afterward nearly horizontal, but inflected at the rim. It withers in decay, and abides for a long time.—They often grow many near together, on the same stick, but have separate roots.—Grows in *Wood-house-Wood*, but is rare there.

AGARICUS *stipitatus*, pileo radiato plicato, stipite pellucido filiformia. XLIV.

WHEEL AGARIC.

TAB. XXXIX. FIG. C.

THE root white, dawy.—The stem an inch and a half high, watery, pellucid, extremely brittle and tender.—The pileus at its first appearance conical, and of a red brown colour; is in a state of perfection in the space of two or three hours, when it becomes of a blackish ash colour, and pellucid. It consists of two membranes, plaited together like a fan; the angles of the plaits a little subtend beyond the margin.—It appears like a small wheel, with spokes.—Grows on horse-dung, after rain, in the month of August. *radiatus.*

- XLV. AGARICUS *stipitatus*, pileo pulvinato griseo, lamellis trifidis
mollis. *angustis albidis, stipite bulboso crasso spongioso.*

SOFT AGARIC.

T A B. XL.

THE root is bulbous, soft, and spongy; emitting short dawning, almost imperceptible, fibres, by which it adheres to dead and putrid vegetables, particularly oak leaves: there is no volva.

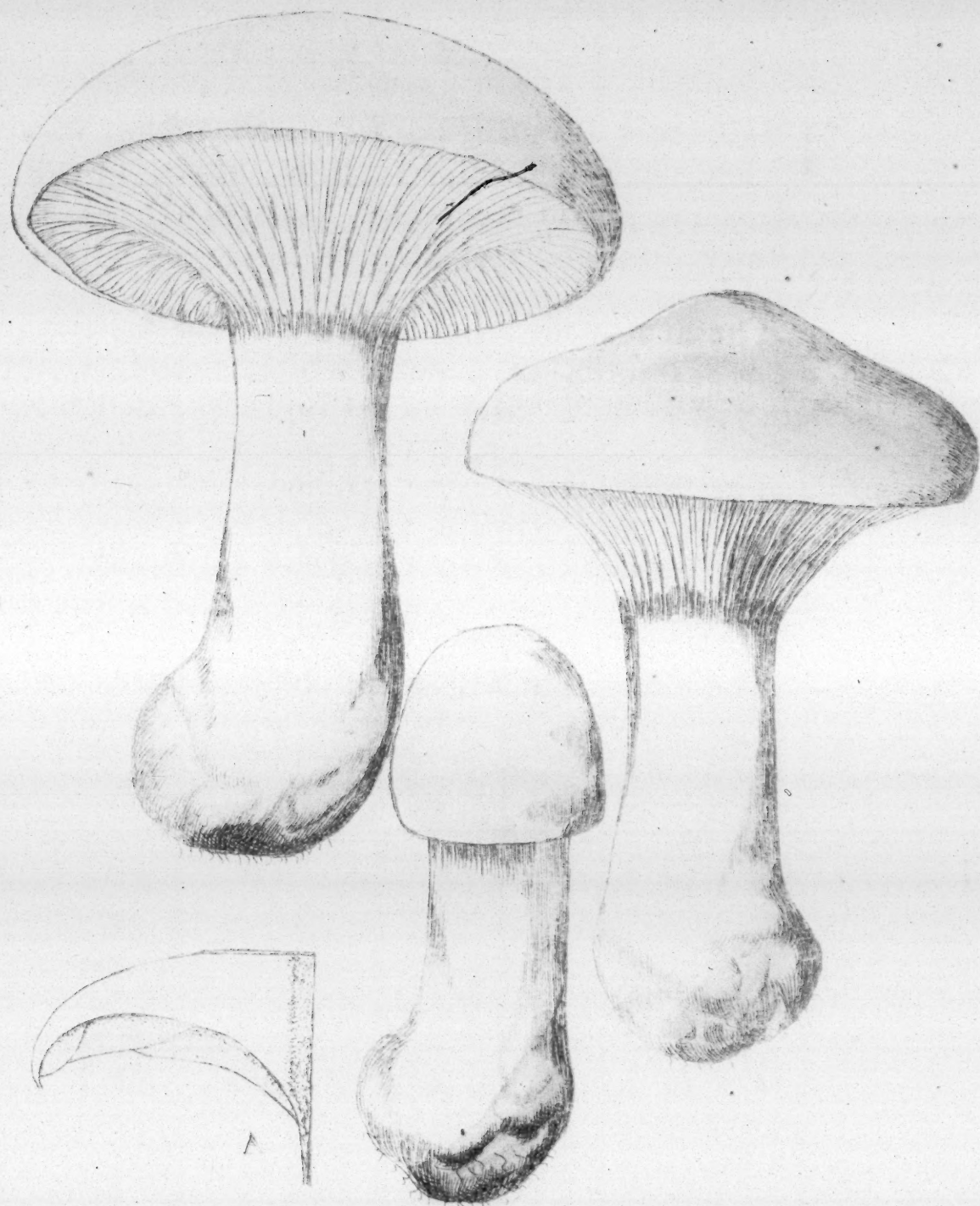
The stem is soft, light, spongy, and brittle; the thickness of one's thumb, of a dead white, round, and perfectly upright; it is about three inches high, and destitute of curtain.

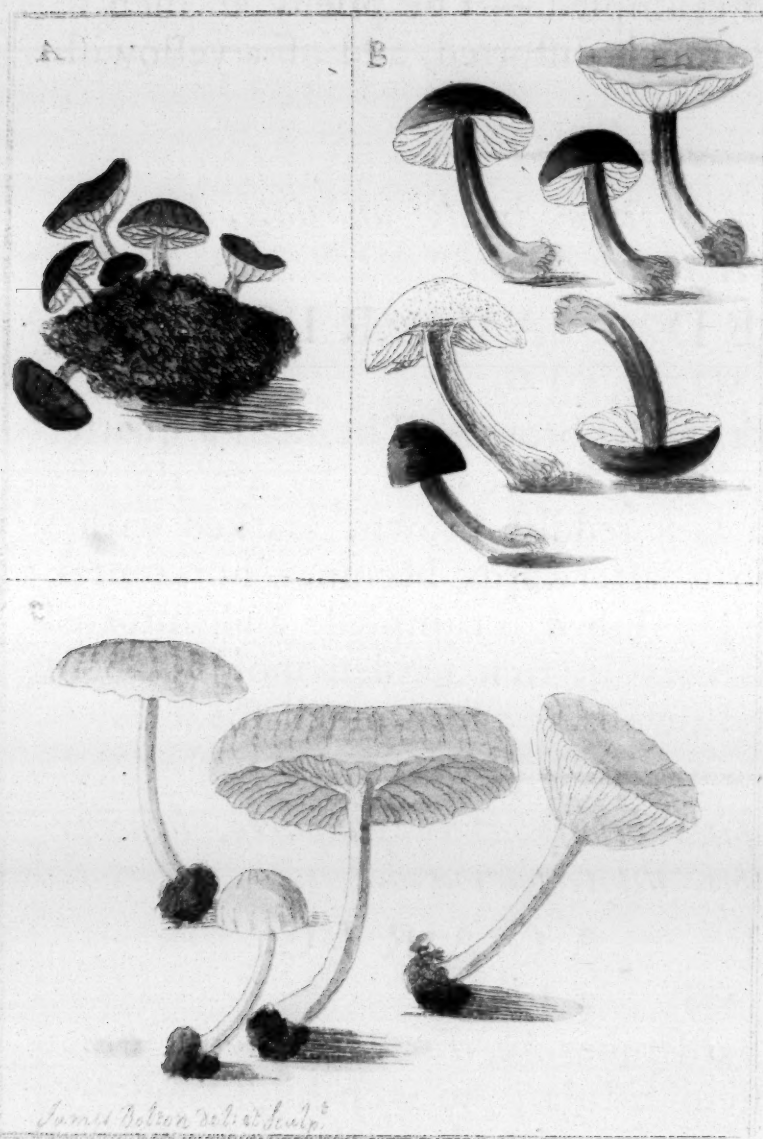
The gills are narrow, arched, arranged in three series, numerous, thin, delicate, and of a dead white, inclining a little to a pale yellowish hue; they are of a soft, dry, light substance; the third series is very short, as expressed in the plate.

The pileus is at first of an oblong figure, when full grown becomes almost flat, but rising round the sides in form of a cushion, the rim is constantly inflected. The surface is of a cloth touch, smooth, and soft; it is of an invariable pale mouse-colour, from its first appearance to the utter decay of the plant; it is three inches in diameter. The flesh or substance of the pileus is dry, soft, brittle, and incapable of being divided into filaments; it cuts like cream-cheese, the colour and substance of which it not unaptly resembles.

Grows in the dry parts of woods, and in pasture grounds about *Halifax*, not unfrequently.

It differs from the *Agaricus piperatus*, in being destitute of milk, in its soft substance, and bulbous root, and in that the gills are in three regular and distinct series. The two last circumstances distinguish it from the *Agaricus integer* also.





AGARICUS *stipitatus, pileo palliado striato contorto, lamellis rugosis, stipite arcuata.* XLVI. *cespitifus.*

TURF AGARIC.

T A B. XLI. FIG. C.

THE root is round, hard, and black; emitting short fibres of the same colour: there is no volva.—The stem is an inch long, bended or bowed; it grows from the perpendicular sides of the pits where peat has been dug.—The gills are very remote, much distorted and crumpled.—The pileus an inch in diameter, striated, pellucid, much distorted, and of a yellowish clay colour.

AGARICUS *stipitatus, pileo fusco striato undulato, lamellis carneis, stipite brevi.* XLVII. *tortilis.*

CRUMPLED AGARIC.

T A B. XLI. FIG. A.

THE root is small, black, and fibrous.—The stem a quarter of an inch high, of a dusky flesh colour; as are also the gills.—The pileus is of a dark reddish brown, marked with a few *stria*; it is convex at first, afterwards becomes horizontal, or funnel-shaped; the margin lobed, crumpled, and distorted in various directions.—Grows in rich garden-mould, about the roots of such plants and shrubs as afford much shade.

AGARICUS *stipitatus, pileo hemisphaerico purpureo, lamellis trifidis albis, stipite purpureo.* XLVIII. *purpureus.*

PURPLE AGARIC.

T A B. XLI. FIG. B.

THE root is a round, hard tubercle, furnished with brown short fibres.—The stem fistular, an inch high, and of a livid purple.—The gills deep, arranged in three series, and white.—The pileus more than half an inch in diameter; while young hemispherical, of a livid purple, and a little clammy; afterwards horizontal, and of a pale brown.—Grows under close plantations of fir, about *Halifax*, in July, plentifully.

- XLIX. AGARICUS *stipitatus*, pileo villoso fulvo, lamellis trifidis
villifus. *leucophæus*, cortina alba, stipite adscendente, an *picromyces*
tunicatus. Battar: p. 47, Tab. 8, Fig. H. Sive, *Agaricus*
mutabilis. Hudson Angl: 615, 22.

SHAGGY AGARIC. \

T A B. XLII.

THE root consists of a mouldy grey dawn, adhering to the bottom of the stem; it is not surrounded by a volva.

The stem is of an hard dry brittle substance, of a dusky white, inclining a little to a pale buff colour; it grows at first horizontally, and then curving upwards, is five or six inches long, and distinguished by a thick dawny *annulus*, which surrounds it near the top, and in which the curtain originates.

The curtain is wite, fine as a spider's web, lacerates, and hangs for some time, in white dawny fragments, round the rim of the pileus.

The gills are arranged in three series, they are arched numerous, narrow, and of a pale greyish ash colour.

The pileus is at first round or globular, afterwards becomes hemispherical, and three inches in diameter; it is covered with a pile or nap, of a dawny, or rather hairy matter, and of a fulvous brown, or fox-colour. The flesh of the pileus is white and brittle; in decay it lacerates and dissolves.

Grows under the roots of trees, in woods where the soil is dry. I saw it in great plenty, in October, 1786, in the dry and steep part of the wood called *Ramsden*, it grew, not only from under the roots of trees, but from the sides of breaks, and from under the rocks; the stem being hidden, and horizontal; and the pileus with only just the curved part of the stem appearing.



James Bolton del. et sc.



AGARICUS *stipitatus*, pileo fusco crasso margine undulato rimoso, L.
lamellis bifidis crassis pallidis, stipite longo fusco inæquale. rigidus.

RIGID AGARIC.

T A B. XLIII.

THE root consists of a number of short brown fibres issuing from the bottom of the stem; there is no volva.

The stem is generally curved or bent, it is five or six inches in length, terminating in a kind of obtuse point below, or rather appears as if the point was bitten off; upwards it increases in thickness for about half its length, and decreases again to the top; it is an inch or more in diameter, in the thickest part; while the plant is young it is solid, afterwards becomes fistular, in both states is of a brown grey colour, and of an hard, dry, brittle substance: there is no curtain.

The gills are in two series, few, narrow, of a very pale yellow, rigid, brittle, and very much crumpled and undulated, by reason of the rolling in, or inflection of the pileus.

The pileus is at first round, afterwards becomes bluntly cone-shaped; while young the margin is much inflected round the rim, so as to embrace the stalk; in the next stage of growth it is much undulated or crumpled round the margin; at last it splits in several places, falls and dissolves. Its colour is a dusky reddish brown, from first to last; the substance of the flesh thick, brittle, dry, and white.

Grows in the plantations and wood grounds, about *Fixby-Hall*, in July and August, I have not seen it elsewhere.

- LI. *AGARICUS stipitatus, pileo campanulato lacero, lamellis lateraliter
 sinuosis, stipite fistuloso. Sp: Fl: 1643. Hudson Angl: 617, 28.
 Lightfoot Scot: 1021, 13.*

E G G A G A R I C.

T A B. XLIV.

THE root is bulb-shaped, tapering to an obtuse point below; it is white, emits a few dawy fibres, and is not inclosed in a volva.

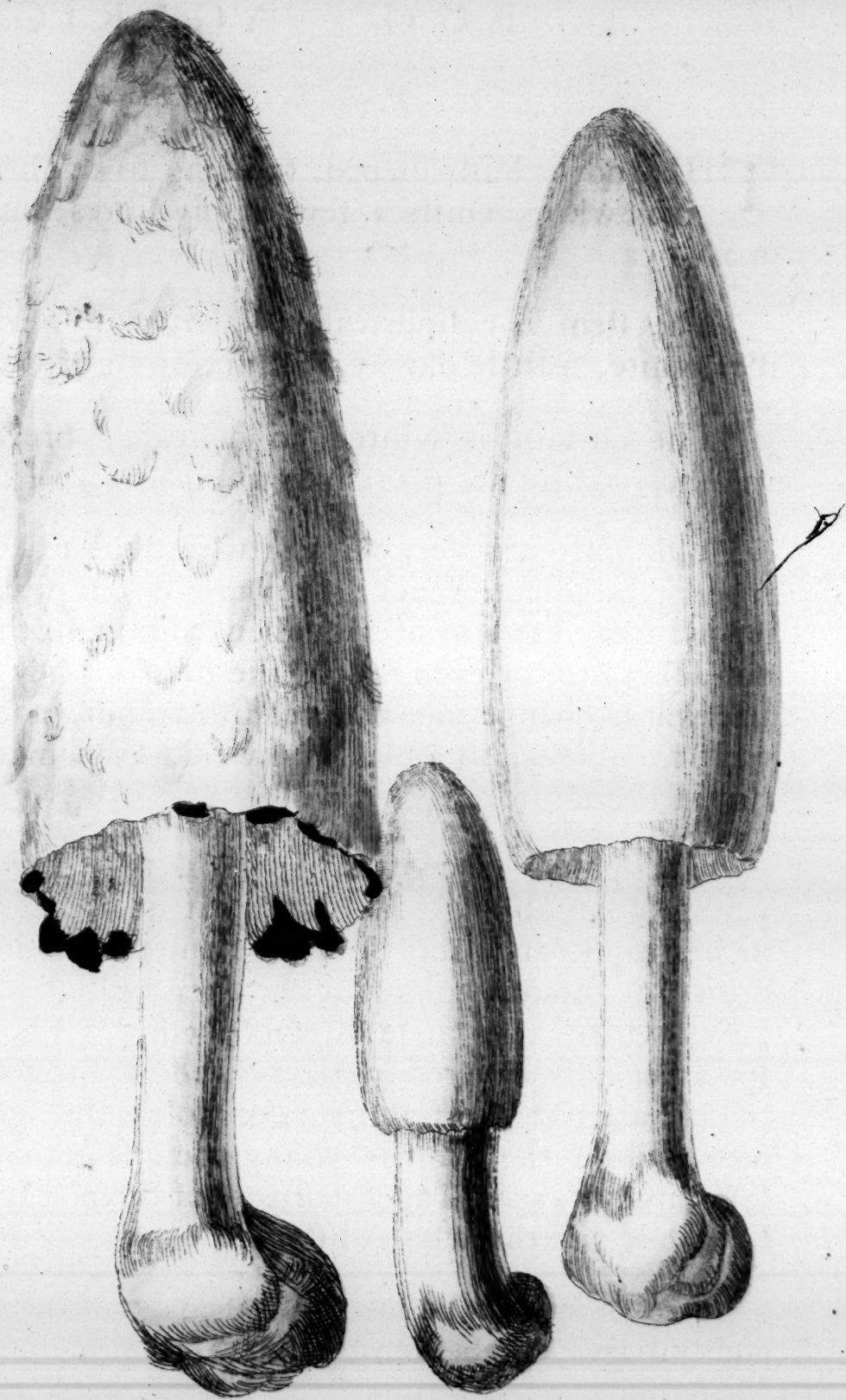
The stem is cylindrical, fistular, with a small perforation; it is white, a little dawy, and six or eight inches high.

The curtain is white and delicate; breaks, and entirely vanishes, while the plant is young.

The gills are very numerous and close, broad, deep, and render the pileus heavy; they are in one series, being all extended from the rim of the pileus almost to the centre, but do not adhere to, or even touch, the stem. They are at first white, afterwards change to a pale reddish colour, and at last dissolve, with the pileus, in a black inky liquor, which falls from the rim in round drops.

The pileus is conical, terminating bluntly above, while young of an oblong oval figure; it is from four to six or eight inches high, and one or two diameter at the base; it is of a brown or fuscous colour at the apex, which colour is lost in a dusky white, at a little distance below. The surface, in some specimens, is covered with a kind of brownish dawy scales, which are not the fragments of volva, but grow from its surface; while the plant is young these scales do not appear, and sometimes it is at all ages destitute of them. In decay the pileus lacerates, and the whole dissolves.

Grows in sand besides grass-beds, and by-paths, near towns and villages, in September and October.





TD

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E R R O R S O F T H E P R E S S .

THE Writing of the Manuscript being a little obscure, the Printer unacquainted with the Latin Tongue, and the Author wanting proper Opportunities to correct the Press, have occasioned the following numerous ERRATA, which it is hoped the Reader will forgive.

In the Dedication : p. 2, l. 8, read *catalogues*.—In the Introduction : p. 7, l. 12, read *funnel-shaped*.—p. 9, l. 3, read *a species*.—p. 12, l. 14, read *not at all*.—p. 13, l. 24, erase *to*.—p. 14, l. 18, read *giffam*.—p. 15, l. 17, read *succisa*.

In the Book : p. 1, l. 29, for *turgid*, read *sordid*.—p. 4, l. 2, read *dentatis*.—ib. l. 26, read *lamellis bifidis, stipite pileo, lamellisq. albis*.—p. 5, in the margin, read *pompatus*.—p. 6, l. 1, *semi-pellucido*.—p. 11, l. 1, *membranaceo*.—ib. in the margin, *membranaceous*.—p. 13, l. 16, *crumpled*.—p. 14, in the margin, *serratus*.—p. 15, l. 1, *campanulato*.—ib. l. 18, for *turgid*, read *sordid*.—p. 16, l. 1, *stipitatus*.—ib. l. 2, *regidis*.—ib. *ferrugineo*.—p. 17, l. 1, *albides*.—p. 19, l. 1, *lamellis*.—ib. l. 2, *angustis*.—p. 20, l. 2, *campanulato*.—p. 21, l. 2, *ramosis*.—p. 22, l. 3, *flavescentibus*.—ib. l. 4, 19.—ib. l. 15, *comparatively*.—p. 24, l. 17, *fimetarius*.—ib. l. 21, *striated*.—p. 25, l. 2, *cæruleis*.—p. 26, l. 1, *stipitatus*.—p. 27, l. 1, *dimidiatis*.—ib. l. 2, *dilatato basi*.—p. 28, l. 1, *subluteo*.—ib. l. 2, *lamellis fragilibus*.—ib. l. 6, *fibres*.—p. 29, l. 3, *flavicante*.—ib. *subtus*.—p. 30, l. 1, *bifidis*.—p. 32, l. 1, *Pileo*.—ib. *membranaceo*.—p. 34, l. 1, *sessilibus*.—ib. l. 21, for *equal*, read *squat*.—p. 35, l. 2, *aurenti-carneis*.—p. 36, l. 2, *ruberrima*.—ib. in the margin, xxxvii.—p. 38, l. 27, *filiformi*.—p. 39, l. 10, *stipitæque*.—ib. l. 20, *stipitæque*.—ib. l. 23, *filiformi*.—p. 41, l. 1, read *pallido*.—p. 42, l. 2, *leucophais*.—ib. l. 3, after 11, ? after 22, ?—ib. l. 14, *white*.—p. 44, l. 2, *flexuosis*.

N. B. In the Second Volume, after Plate 70, where the AGARICS conclude, will be given, A METHODICAL INDEX of them, with the SYNONYMA of AUTHORS.



